



2017 FAMA Spring Meeting

Meeting Day 2



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CALL TO ORDER

HOUSEKEEPING



This is how it works

Ask the audience a question. Then watch their answers come to life on the screen.



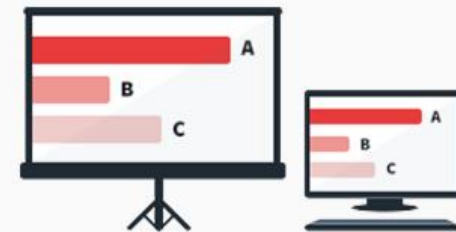
Step 1

Ask your audience a question with the Poll Everywhere app



Step 2

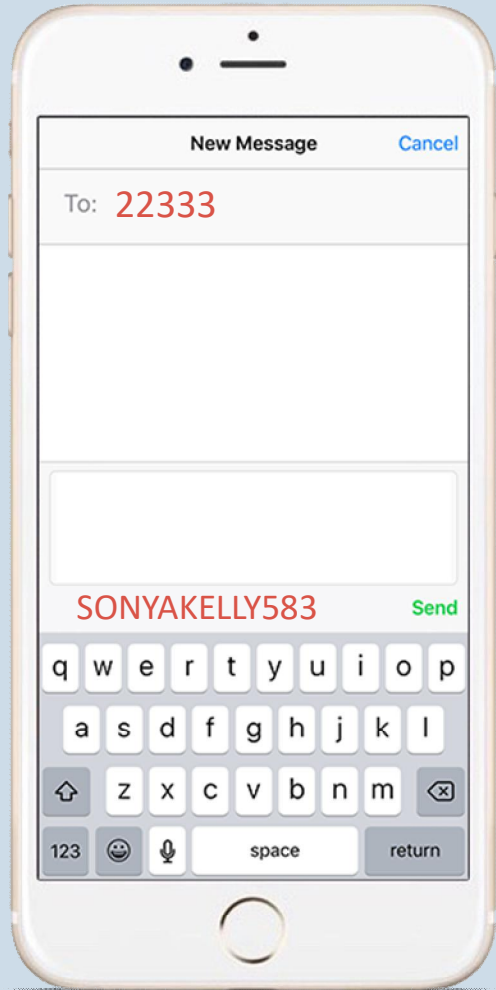
Audience answers in real time using mobile phones, Twitter, or web browsers



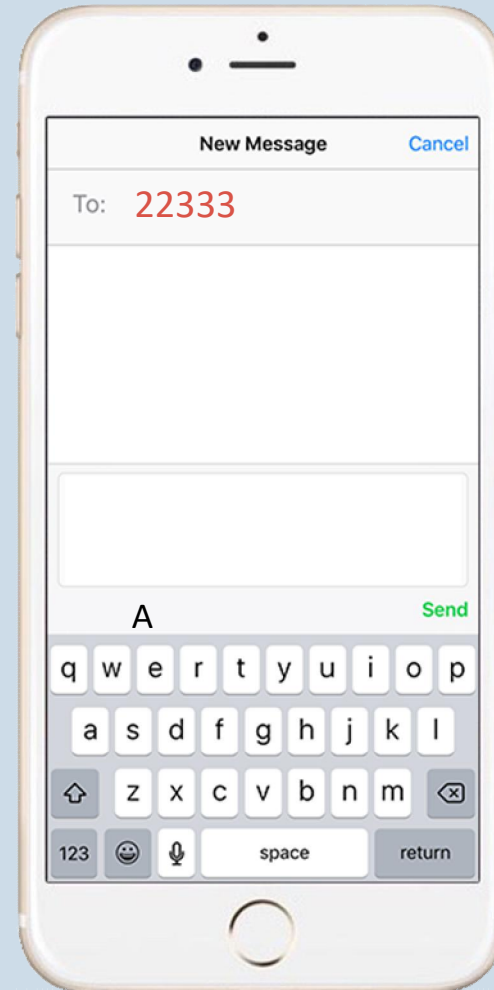
Step 3

See your response live on the web or in a PowerPoint presentation

Participating with Poll Everywhere



Set-up



Text voting





To show this poll

1

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pollev.com/app

2

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MEMBERSHIP COMMITTEE

Gregg Geske



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Committee Members

- " **Tim Van Fleet / Co-Chair** . Akron Brass Company
- " **Gregg Geske / Co-Chair** . Waterous Company
- " Jerry Merges . VisionMark Nameplate Co.
- " Rick Suche . Fort Garry Fire Trucks
- " Oran McNabb . AMDOR
- " Greg Polka . RealWheels
- " **Board Liaison – Bev Lowery** . H.O. Bostrom Co.



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Committee Annual Objectives

- “ Grow Membership 5%
- “ Develop Membership Retention Plan
- “ Engage Member Company Participation



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Targeted New Member Companies

- " CSI Emergency Apparatus
- " Extend-O-Bed
- " *Innovative Controls
- " M. Tech - Wade Meith
- " Odyssey Specialty Vehicles
- " *Precision Fire Apparatus
- " Safety Vision, LLC
- " Volvo Truck
- " Ward Diesel

*** Been Contacted by Chair ... Need help with others**



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New Member Companies

- “ Michelin North America
- “ Matheny Fire & Emergency



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EDUCATION COMMITTEE

David Wunderlin



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Respondent Demographics



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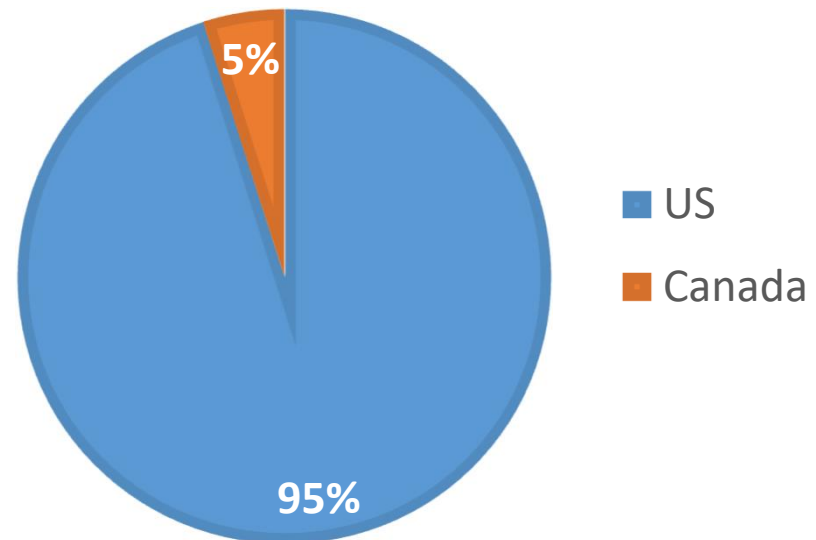
Respondents:

2017 = 1,642

2016 = 1,108

2015 = 1,416

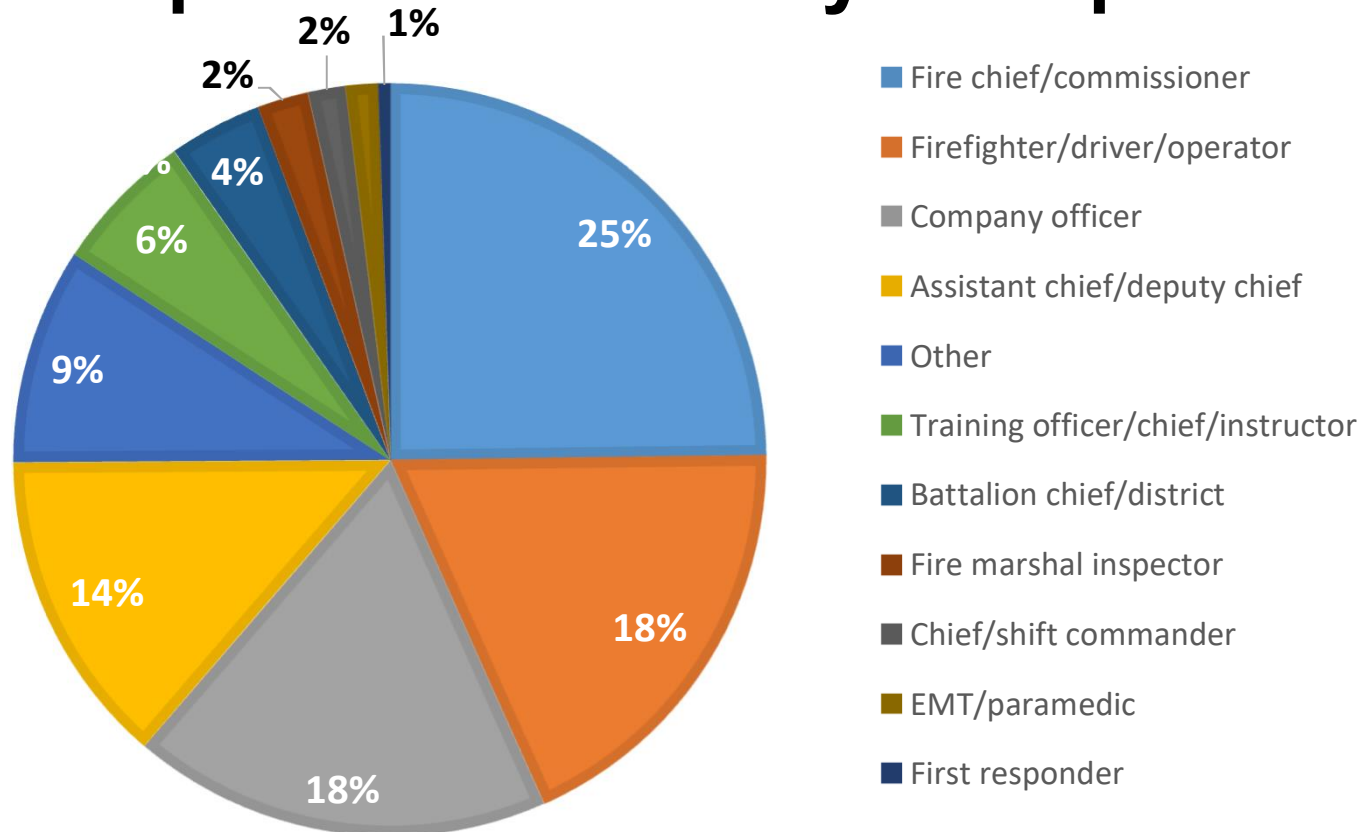
Respondent Location





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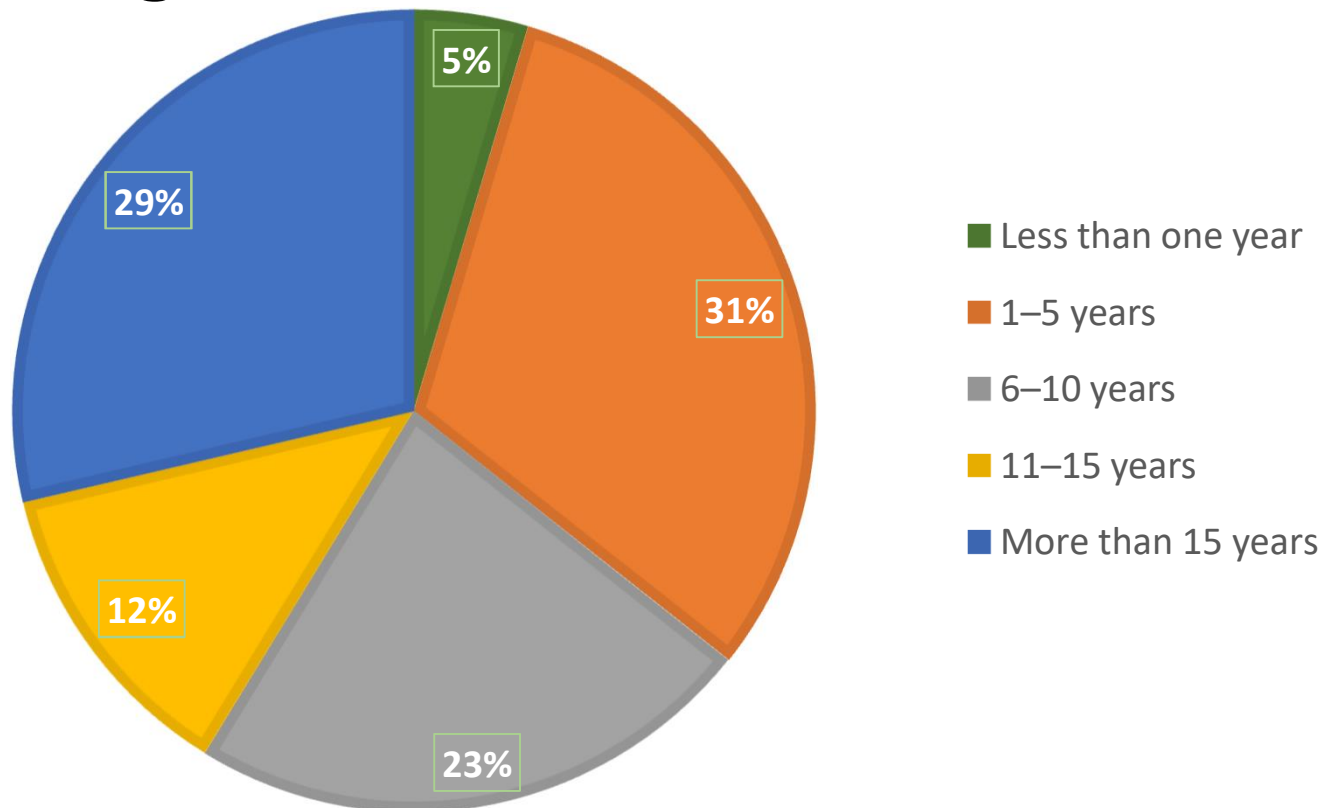
Respondent's Primary Occupation/Title





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Length of Time in Current Position





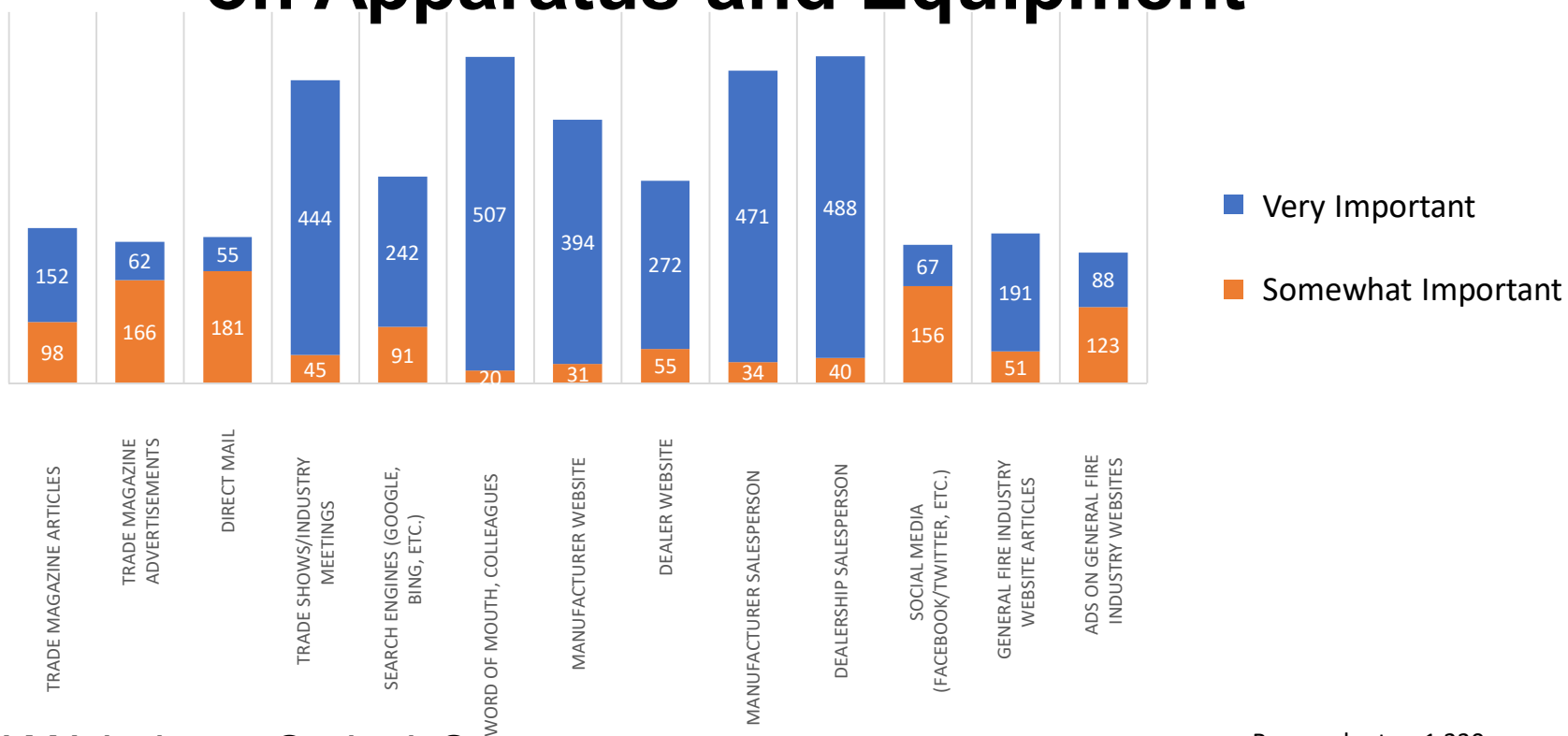
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Respondent Sources of Information



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Highest Ranking Source of Information on Apparatus and Equipment



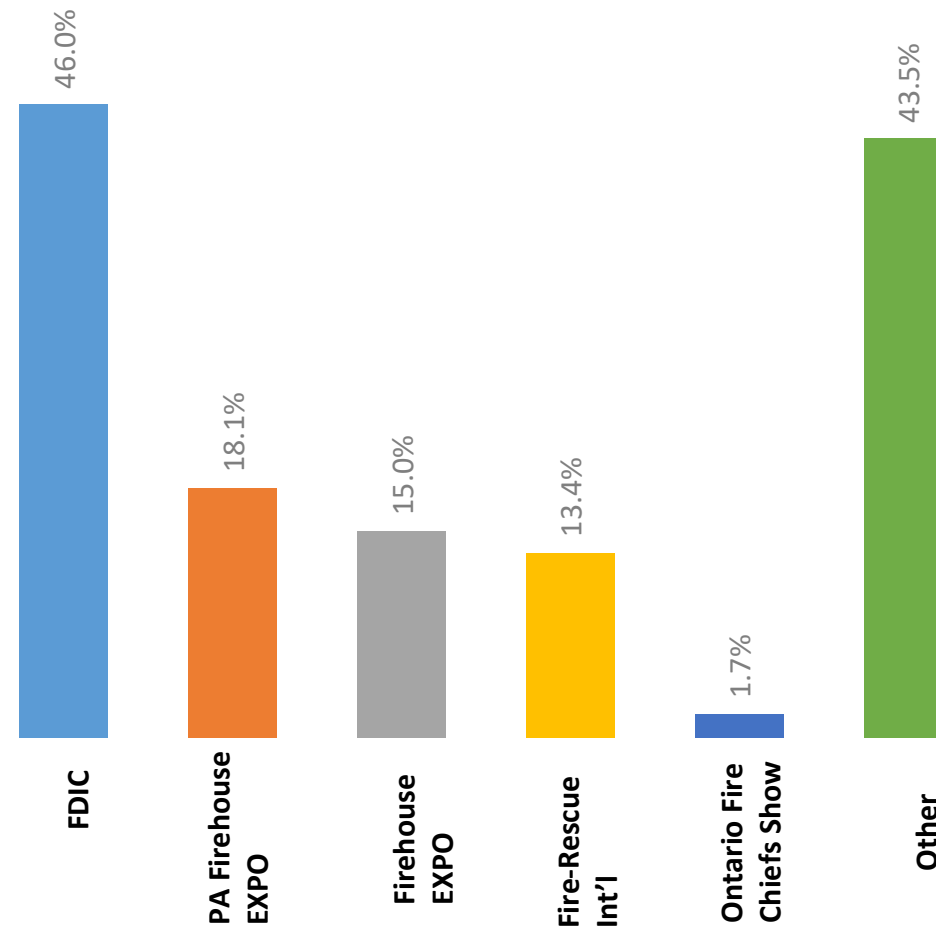
2017 FAMA Industry Outlook Survey

Respondents = 1,330



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Trade Shows Attendance



2017 FAMA Industry Outlook Survey

Respondents = 1,330



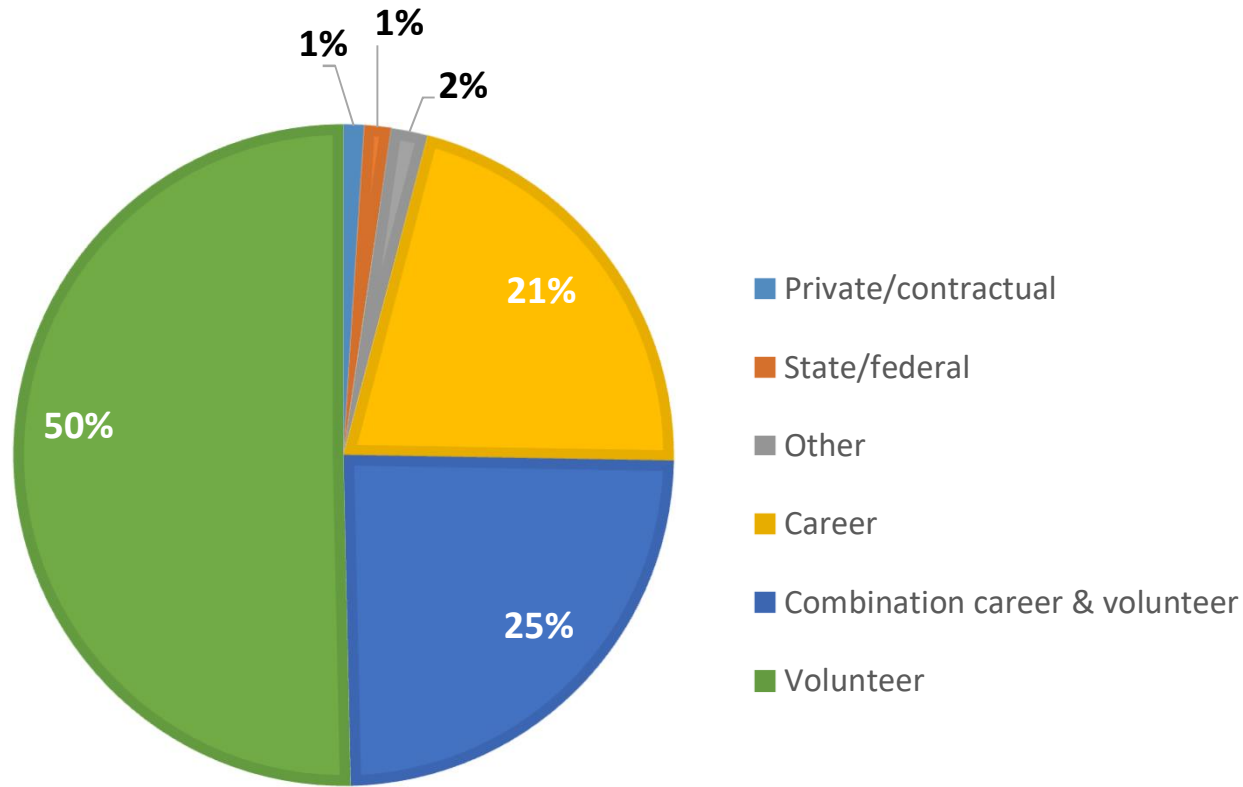
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Department Demographics



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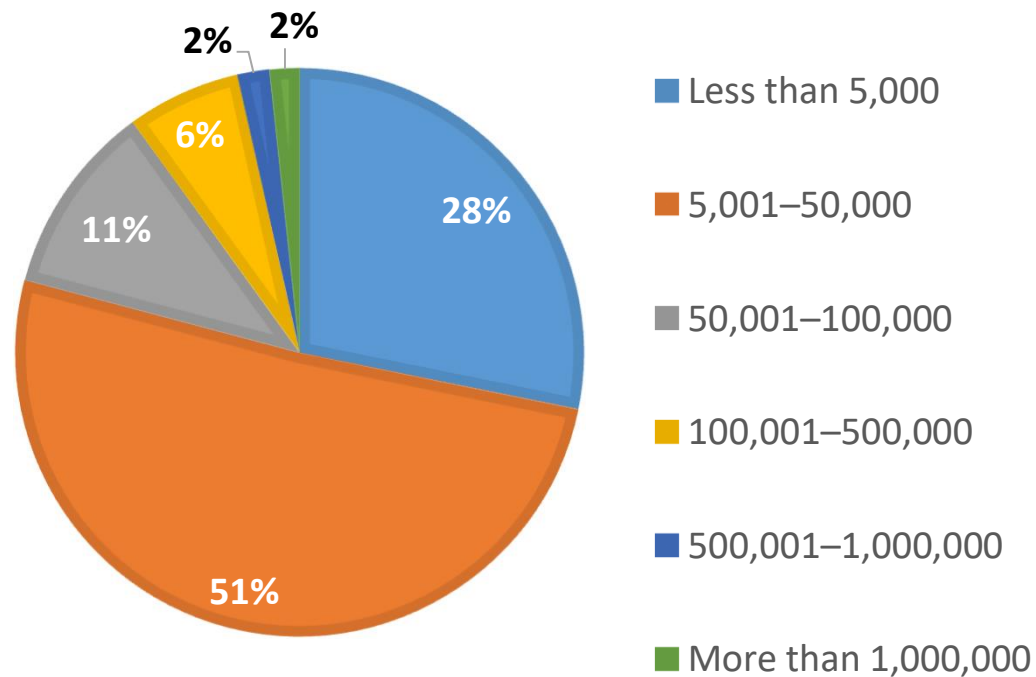
Organization Type





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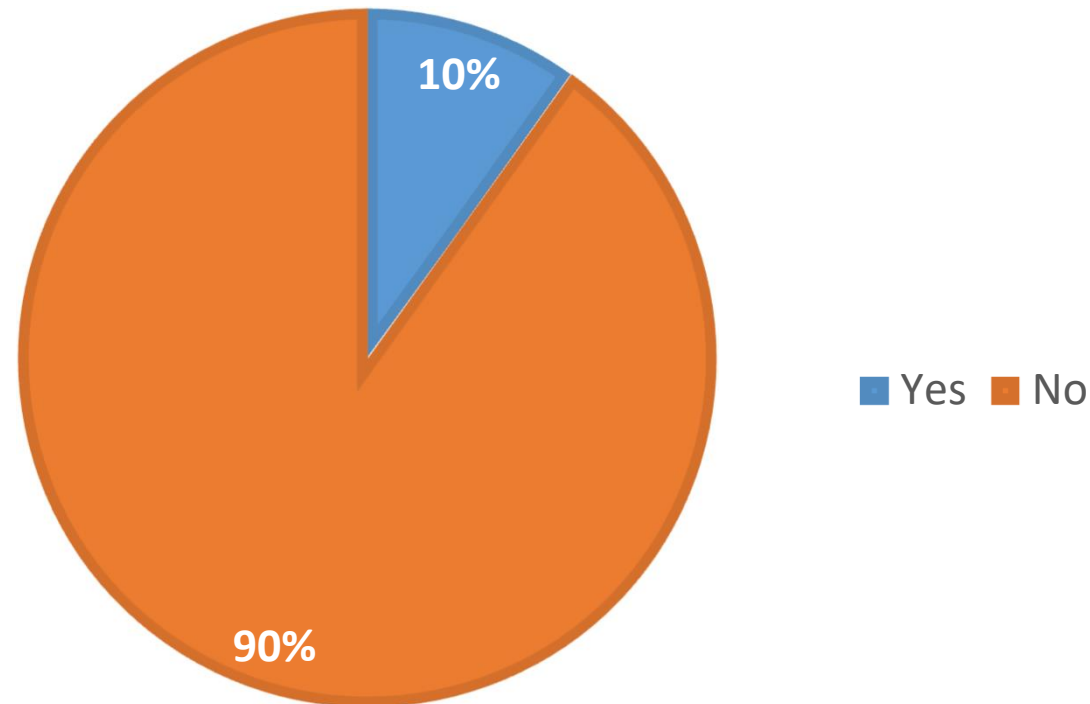
Service Area Population





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FAMA Apparatus Safety Guide in Each Fire Apparatus





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Fleet Demographics



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Apparatus Currently Owned

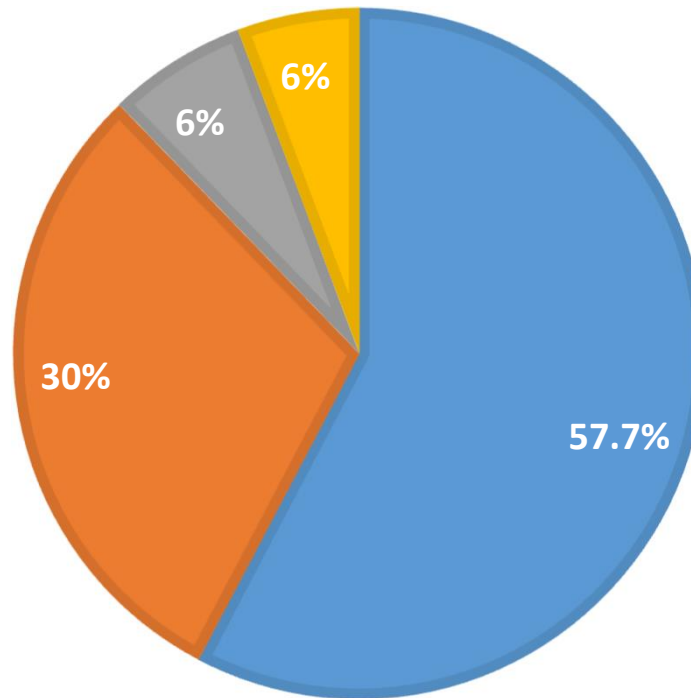
Category	%	
Pumper	96.0	96.0%
Tanker	59.0	59.7%
Utility truck	56.0	56.0%
Aerial	55.8	55.8%
Wildland	55.7	55.7%
Rescue	52.9	52.9%
Ambulance Transport	30.8	30.8%
Heavy rescue	28.3	28.3%
Command center	18.0	18.0%
Other	14.2	14.2%
ARFF	5.9	5.9%

Respondents = 1,642



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Size of Fleet



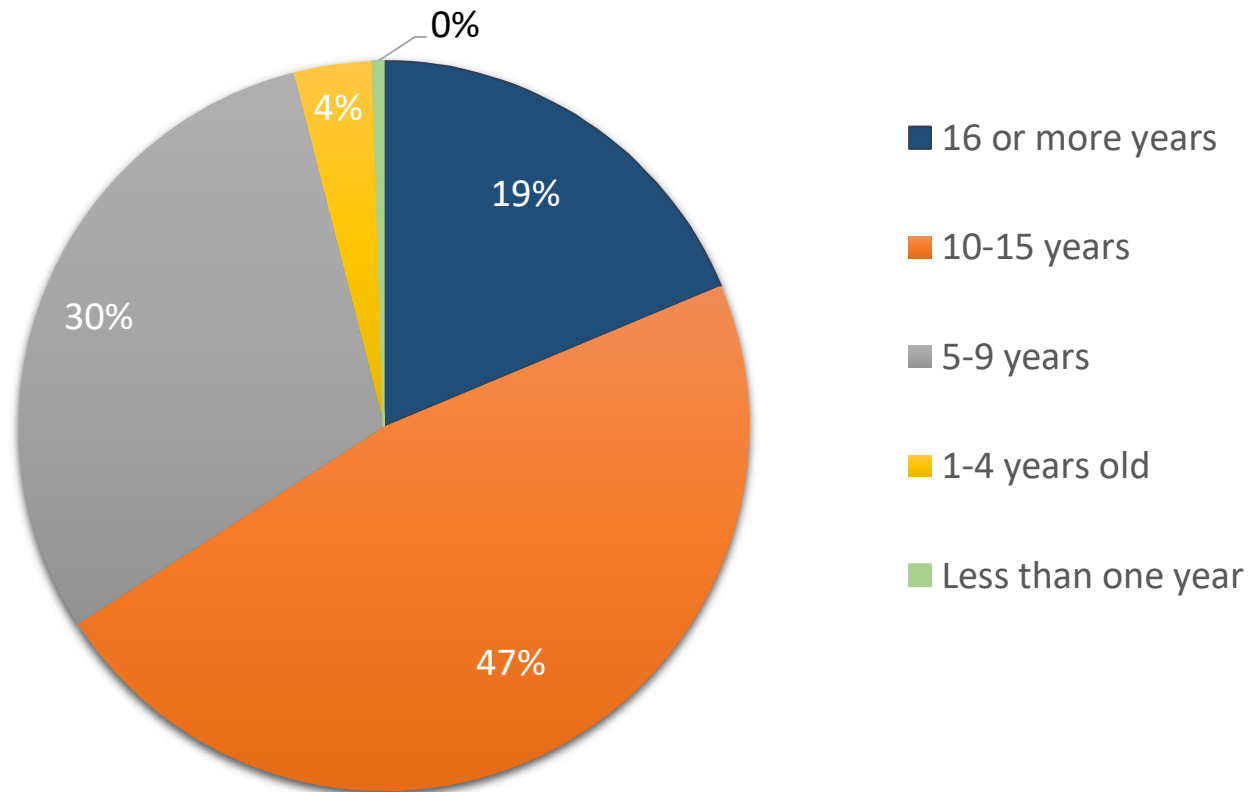
Respondents = 1,642

2017 FAMA Industry Outlook Survey



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Average Age Fleet



Respondents = 1,642

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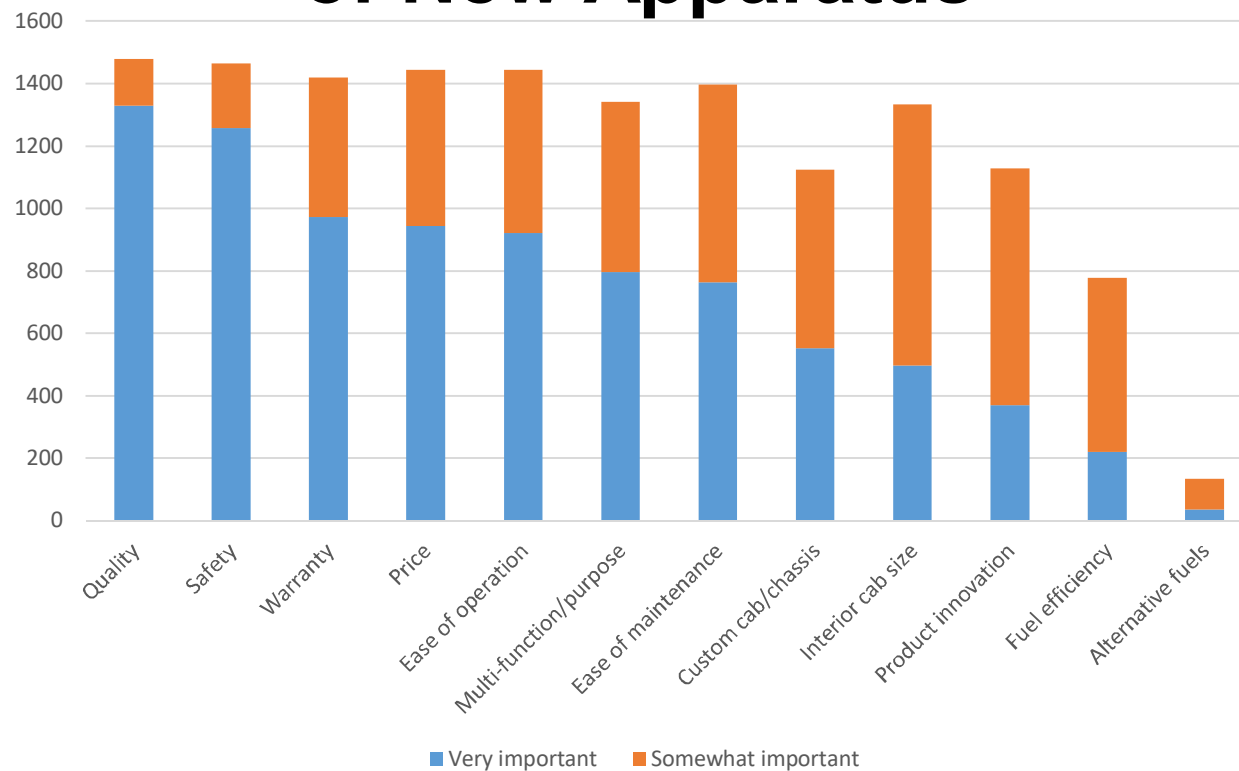
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Purchase Decision Making



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Attributes Ranked in the Purchase of New Apparatus



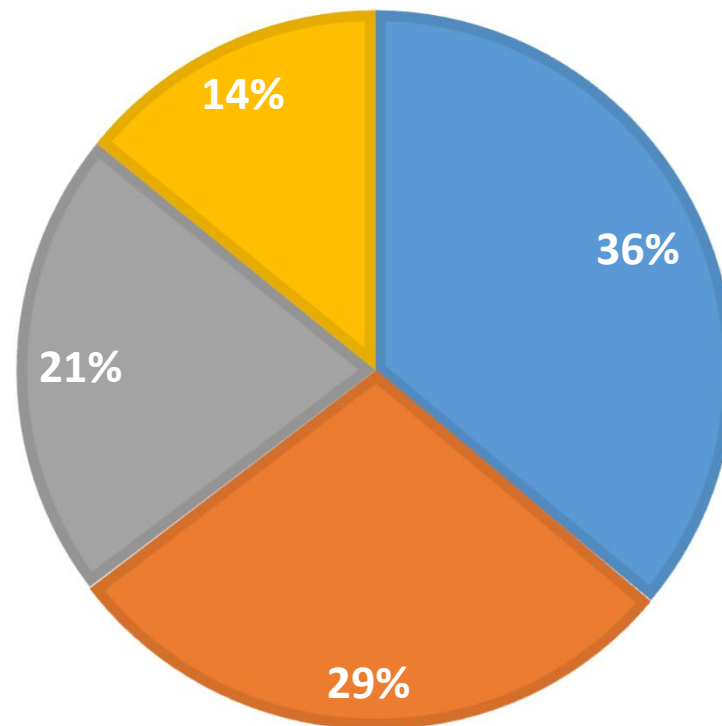
2017 FAMA Industry Outlook Survey



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Top Ranked Factor in Brand Loyalty

■ Quality ■ Service ■ Price ■ Custom Options



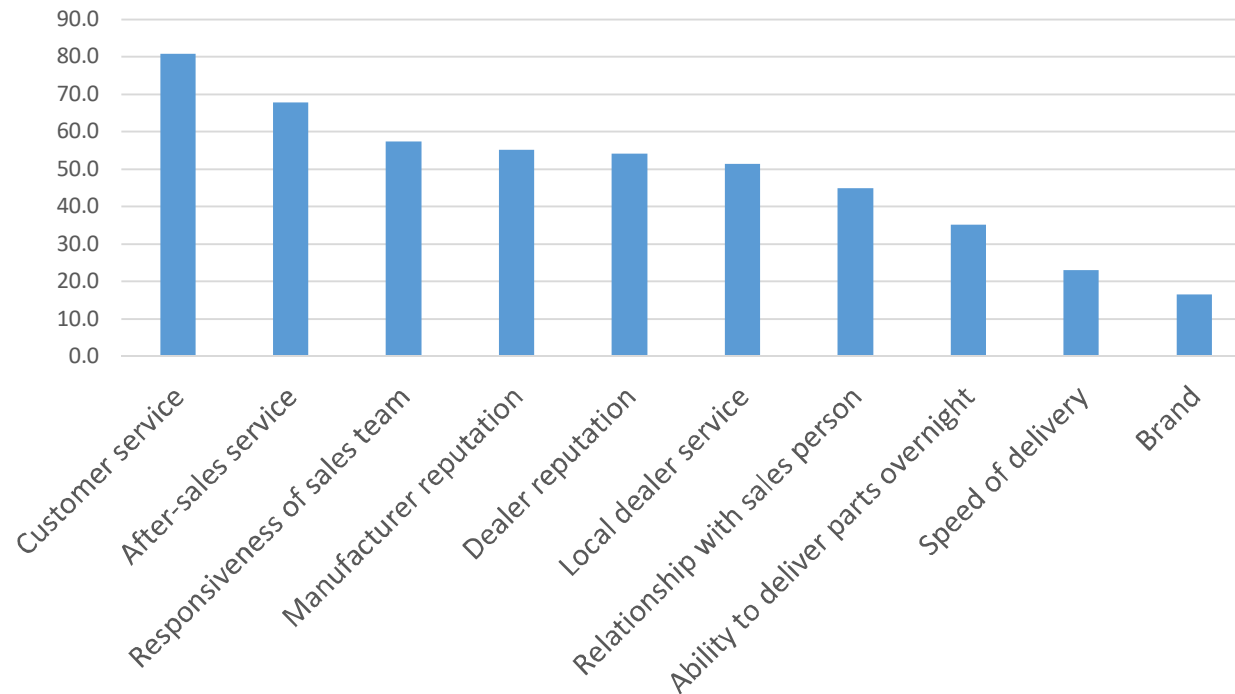
2017 FAMA Industry Outlook Survey

Respondents = 1,493



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Top Ranked Service/Manufacturer Attributes for Apparatus Purchase



Respondents = 1,493



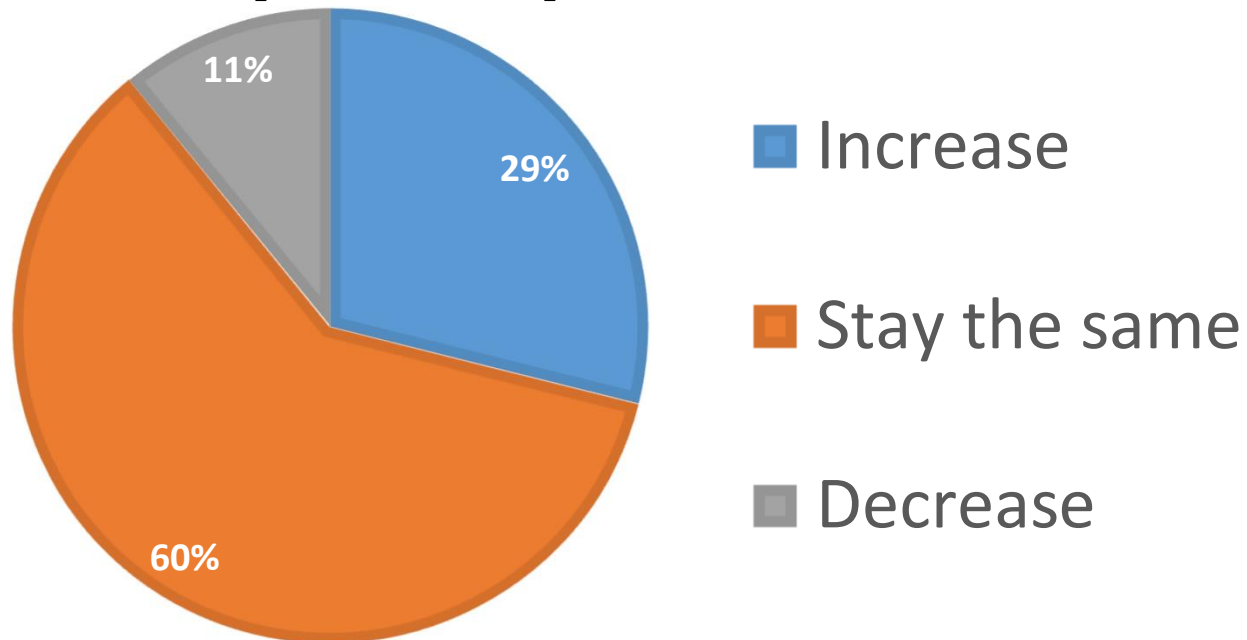
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Budget Changes and Effects



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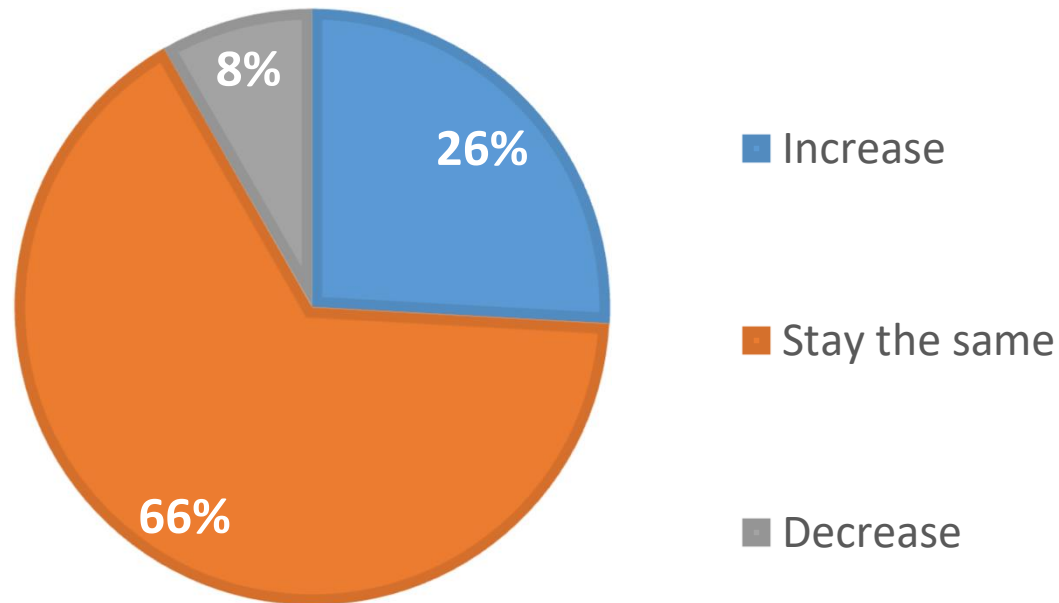
Anticipated Budget Changes Excluding Capitol Expenditures





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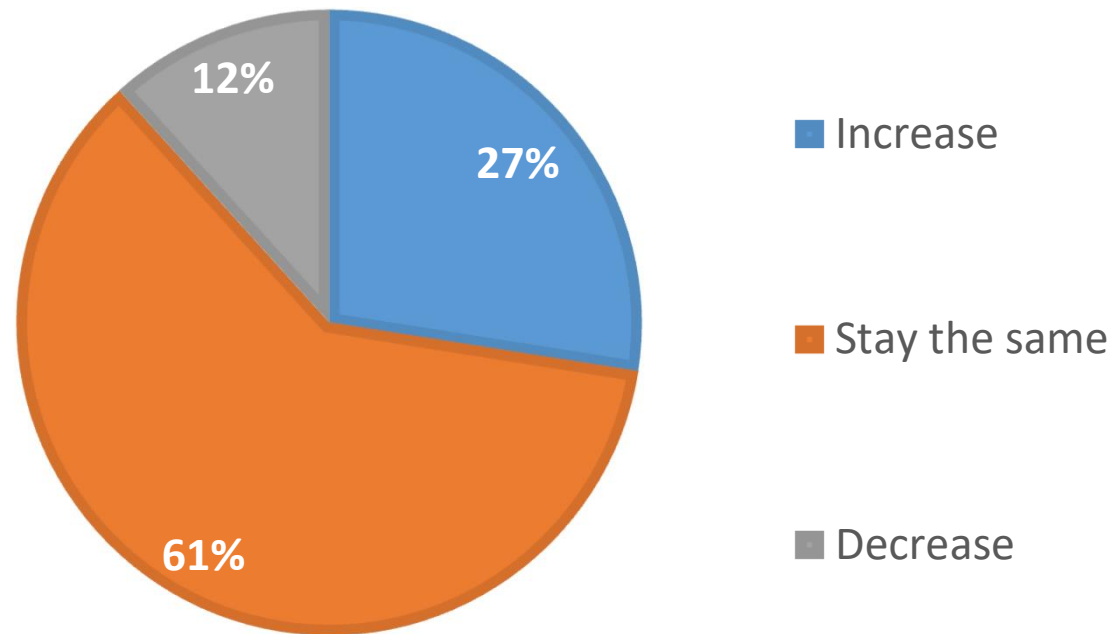
Projected FY17 & FY18 Staffing Budget Changes





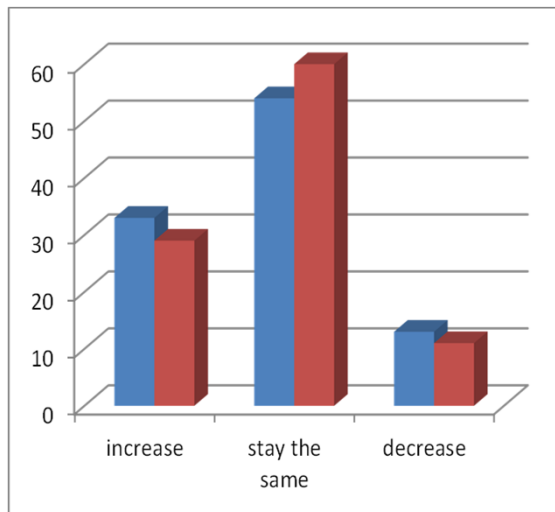
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Projected FY17 & FY18 Apparatus Budget Changes

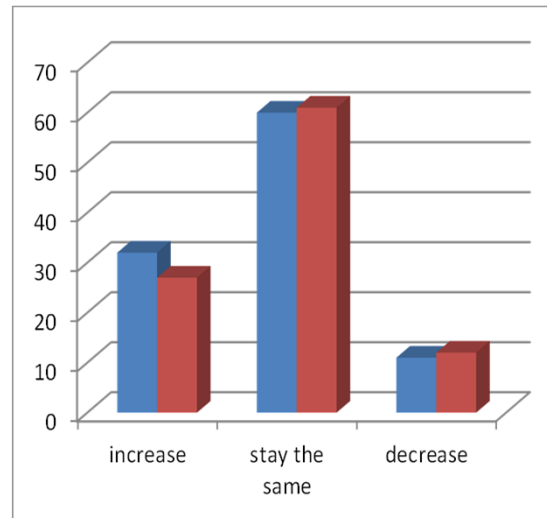




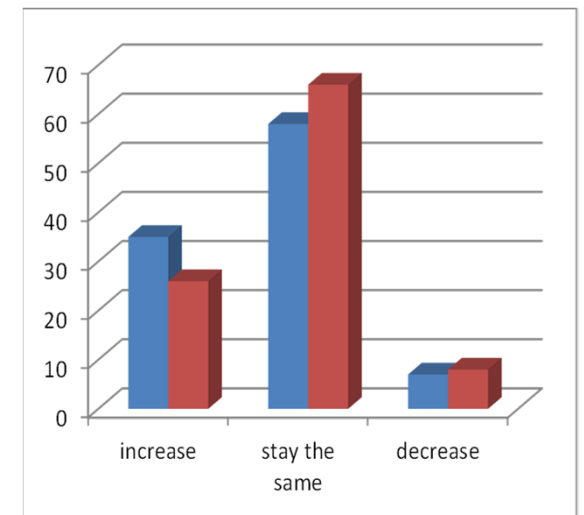
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Budget Changes Excluding
Capitol Expenditures



Staff
Budget Changes



Apparatus
Budget Changes

There is no statistical difference regarding anticipated budget changes across the three categories between the 2016 and 2017 reports.

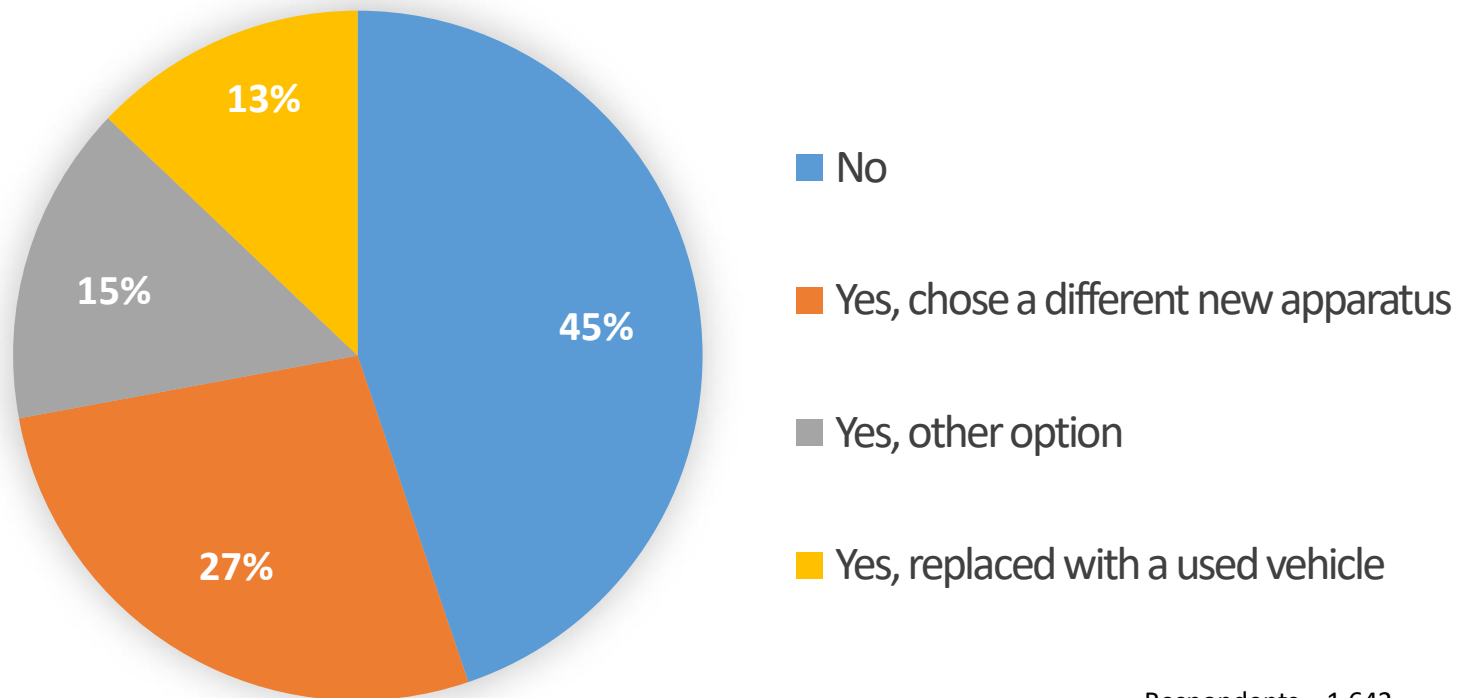
■ 2016

■ 2017



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Changed Apparatus Specification or Selection Due to Cost or Budget Restrictions



Respondents = 1,642

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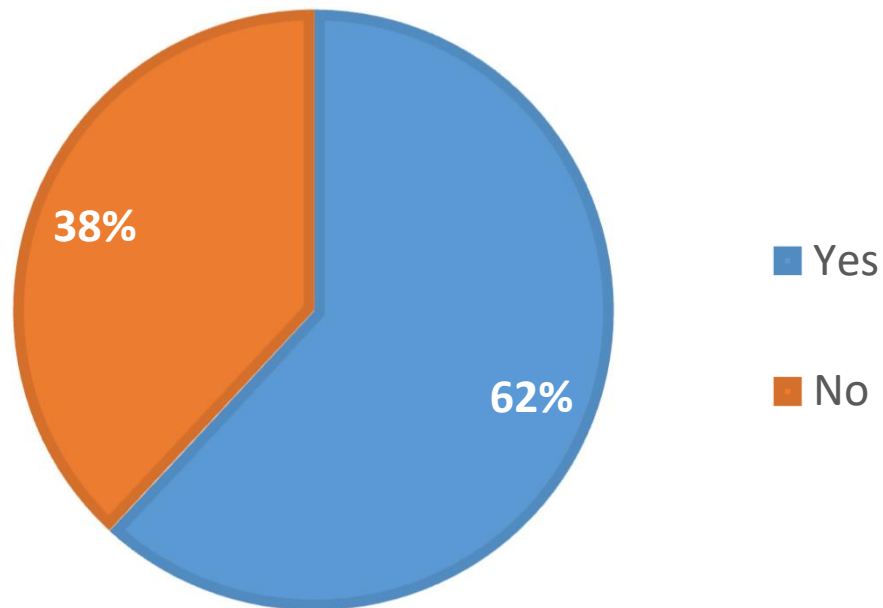
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Acquisition Plans



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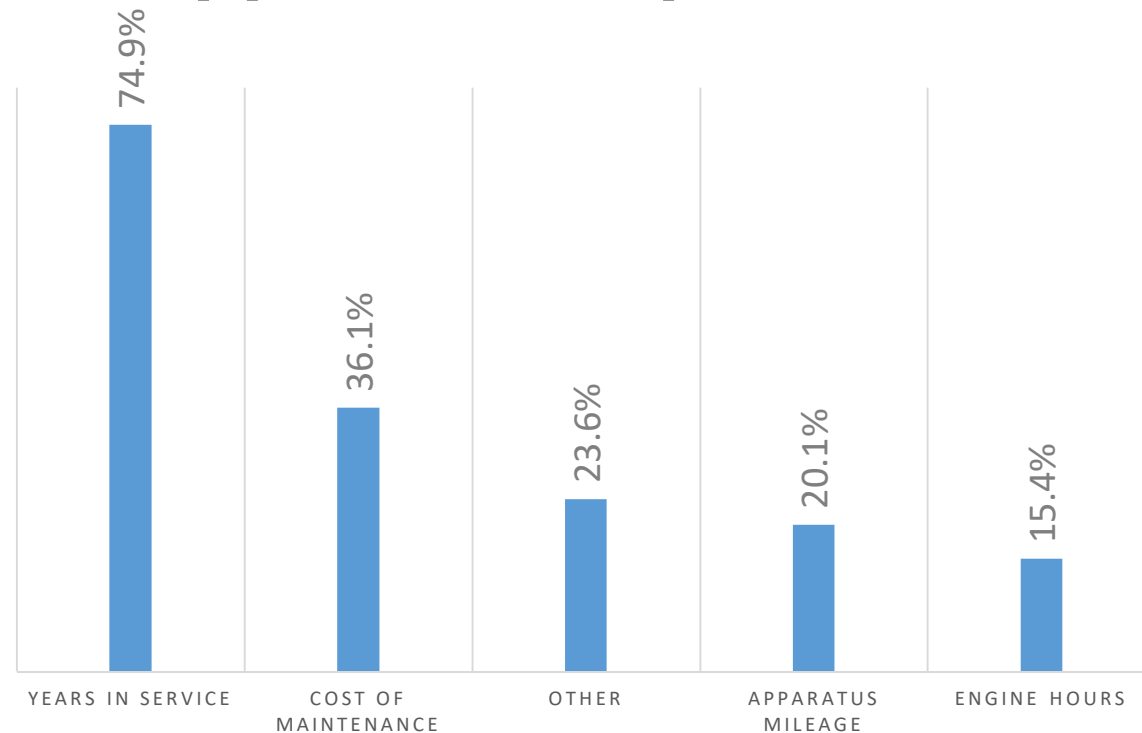
Department Has Apparatus Replacement Plan or Process





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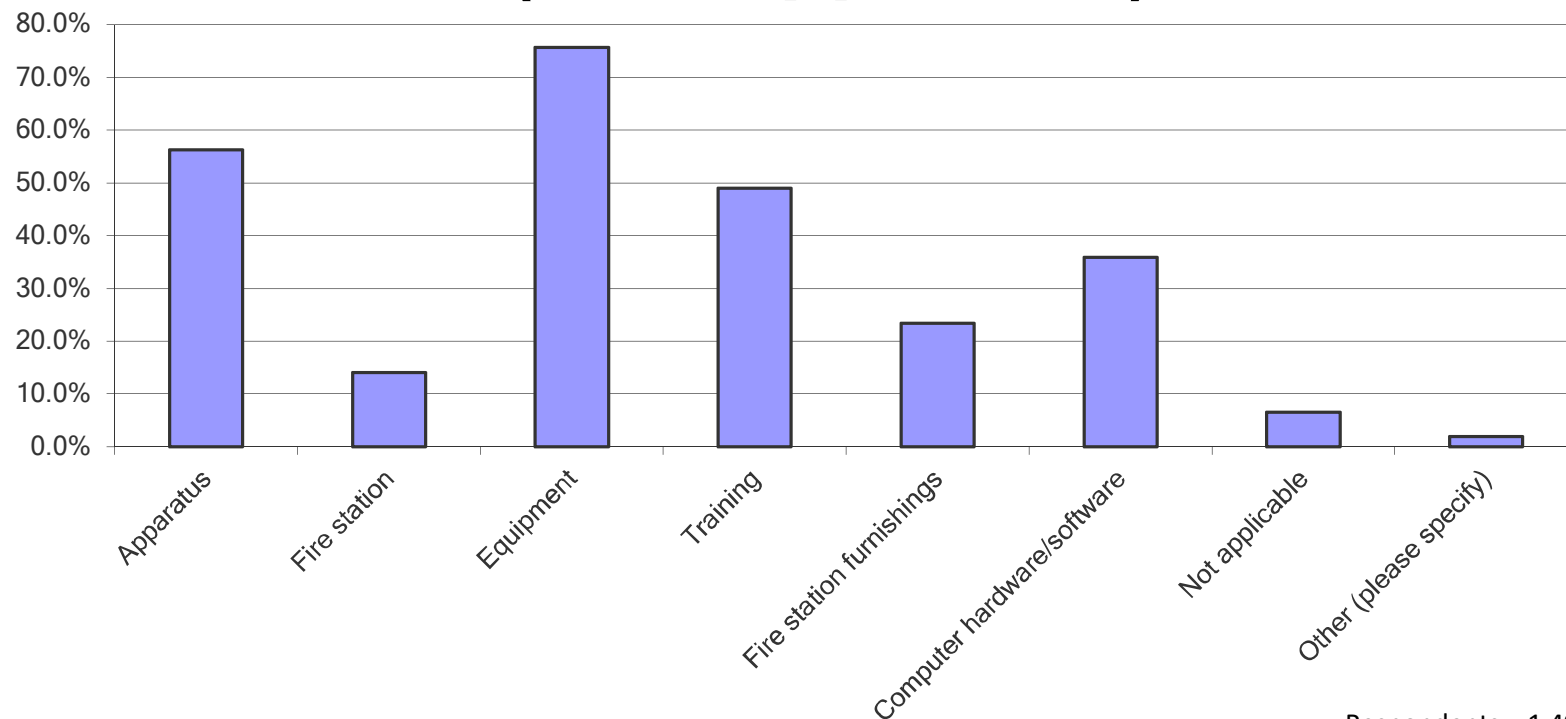
Factors Determining Apparatus Replacement





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Anticipated FY17 Purchases (Non-Apparatus)

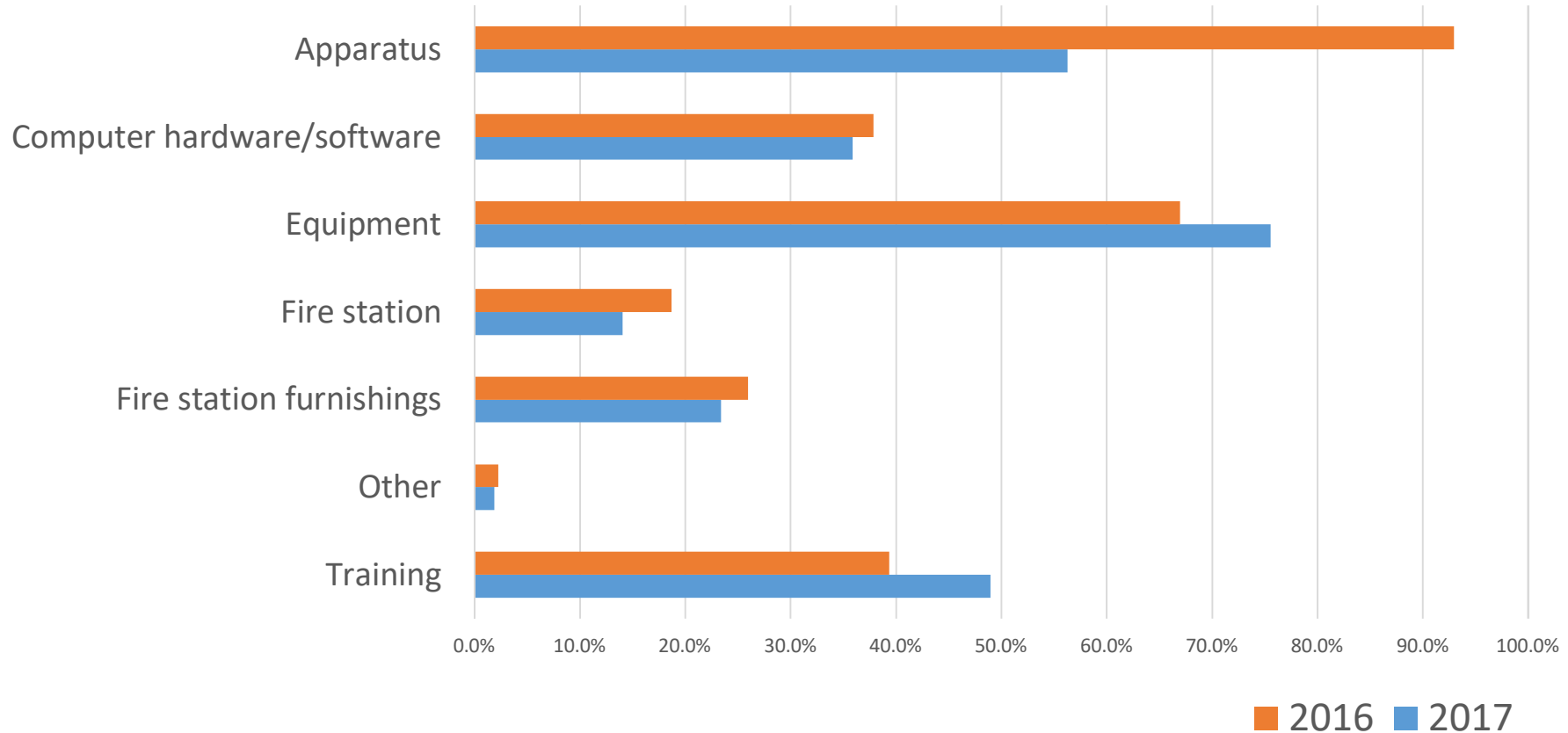


Respondents = 1,493



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Anticipated 2017 to 2016 Purchases

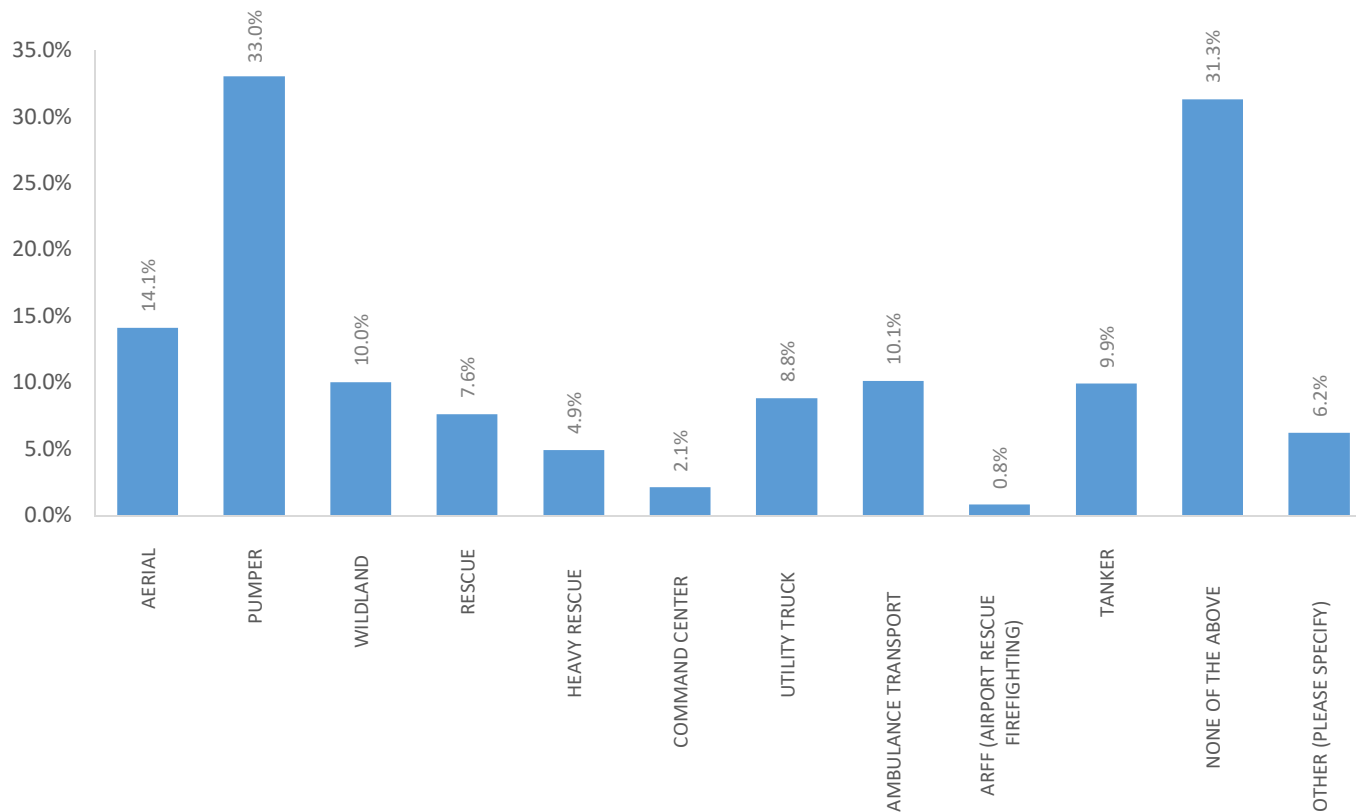


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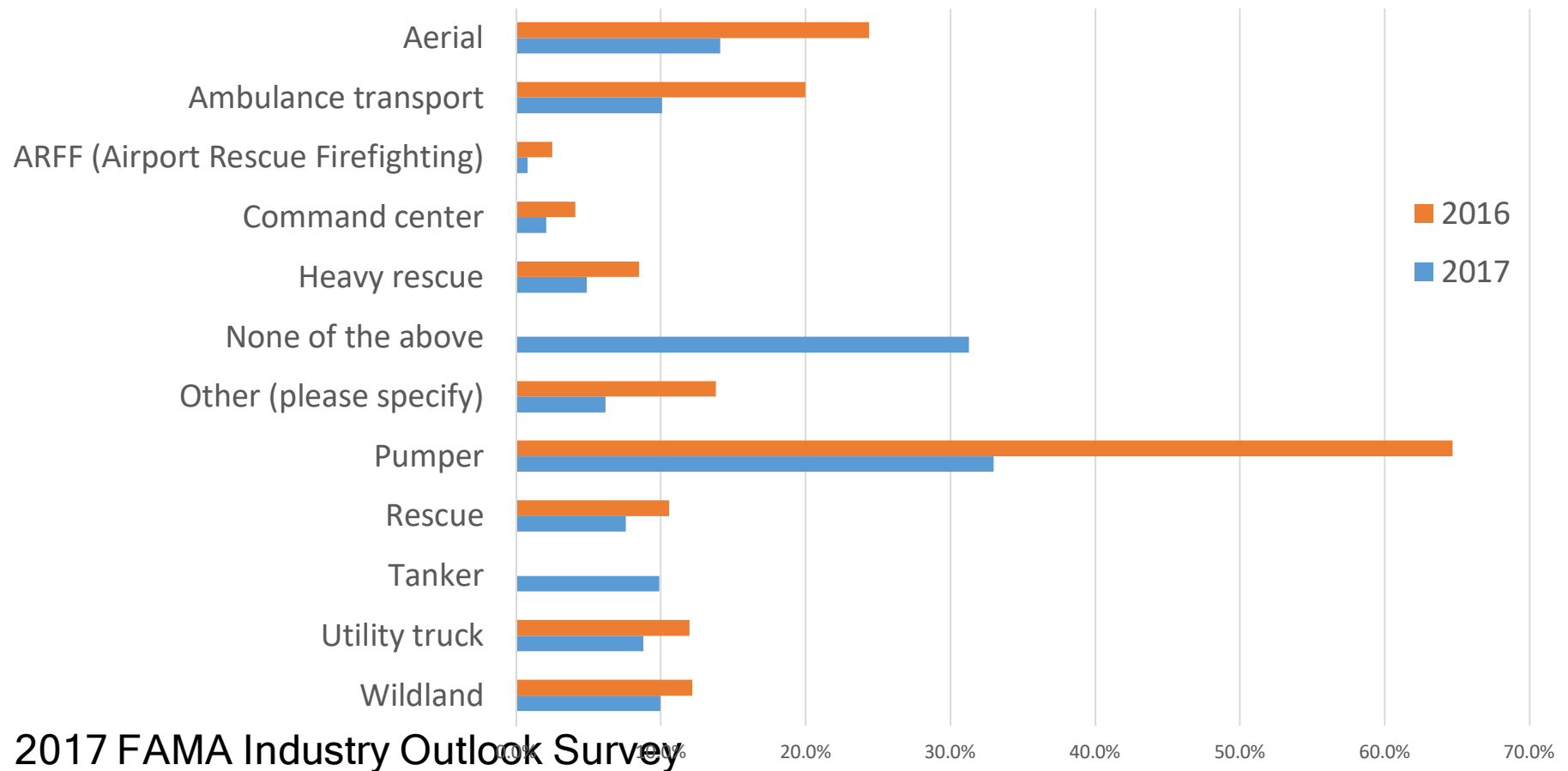
FY17 Planned Apparatus Purchases





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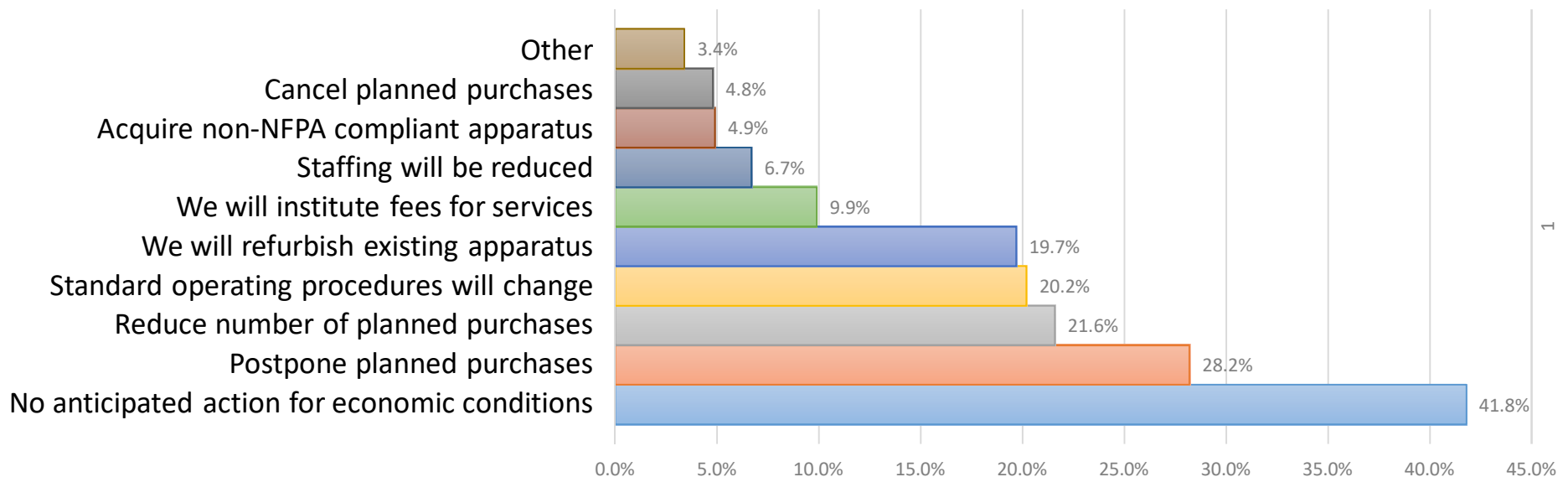
2016 to 2017 Planned Apparatus Purchases





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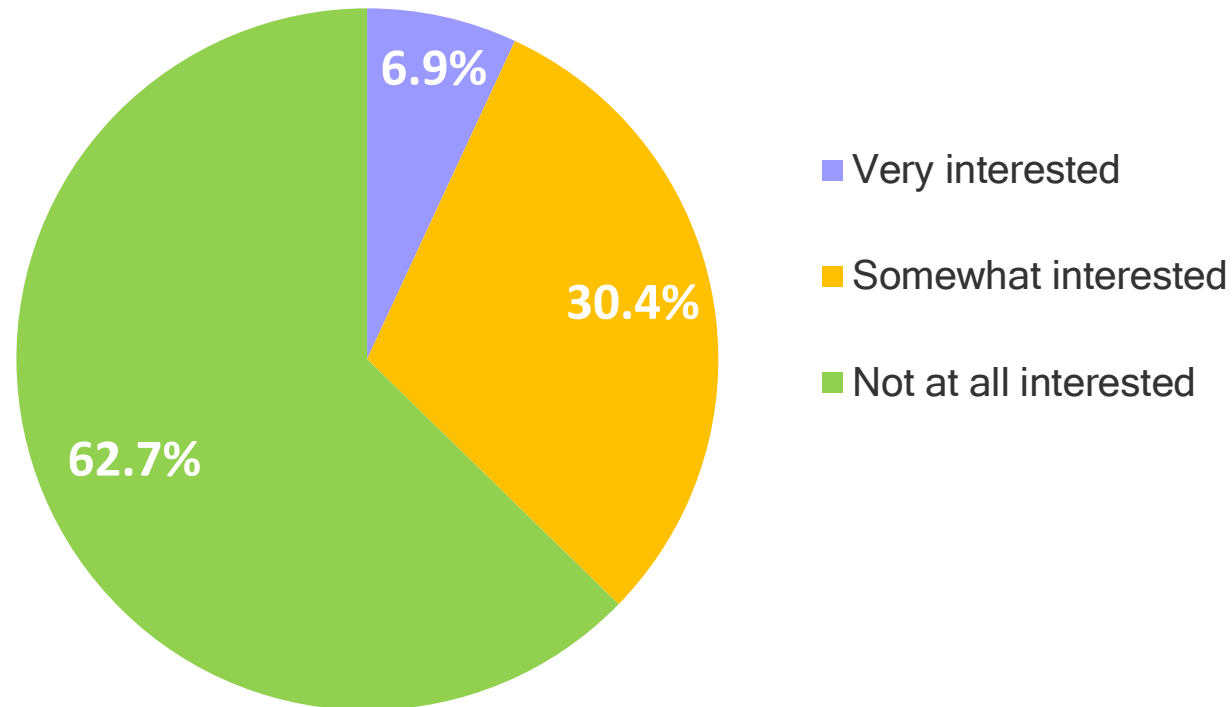
Economic Conditions Influencing Apparatus Acquisition





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Interest in Leasing Apparatus from Manufacturers





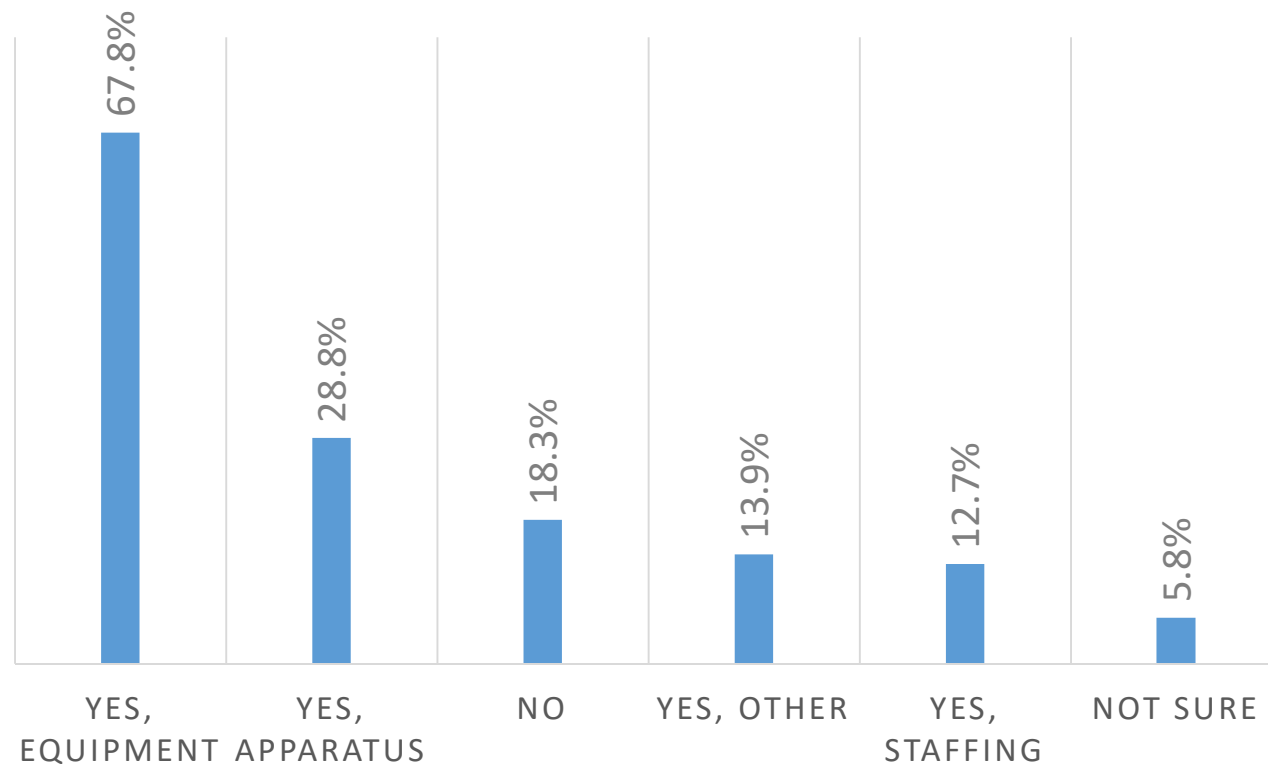
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Grant Applications and Funding



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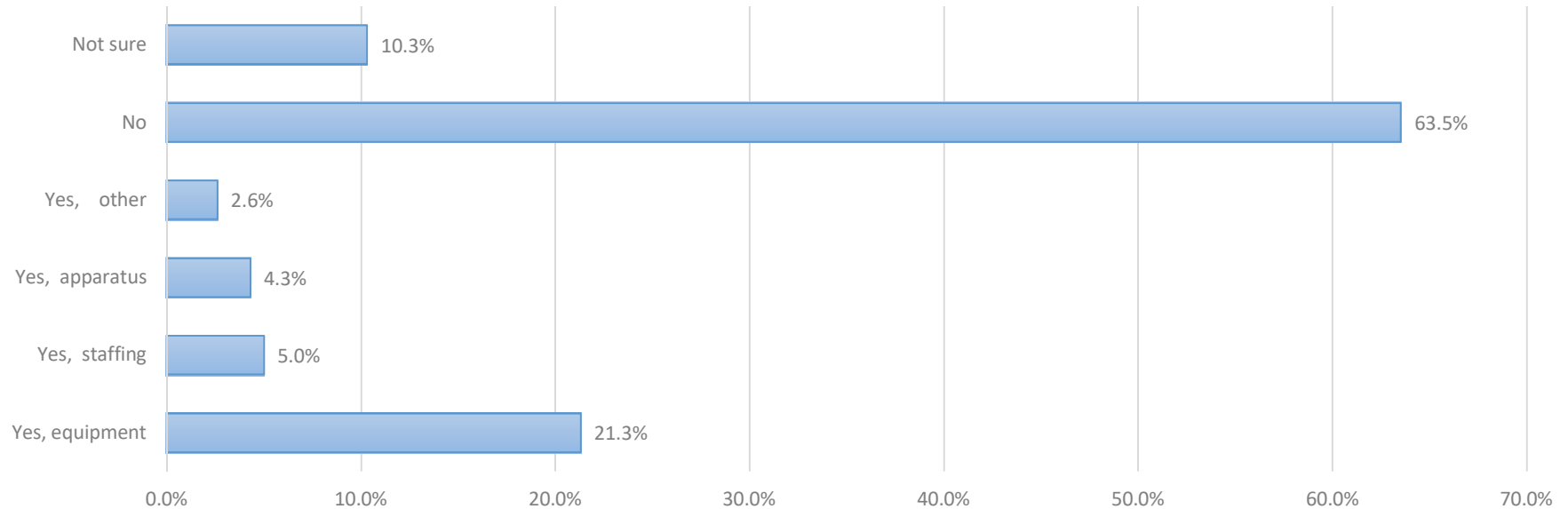
Submitted Grant Applications in the Past 2 Years





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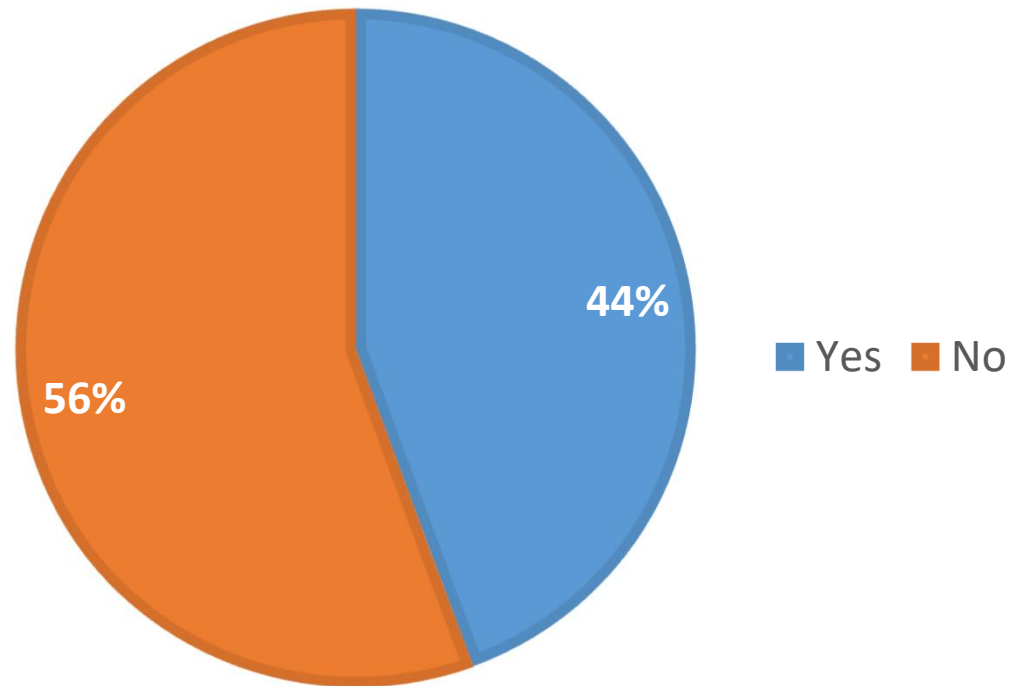
Received AFG / SAFER Grant in the Past 2 Years





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Received a Grant OTHER Than AFG/SAFER





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Special thanks to the industry publications and organizations help this year!

Firehouse

Fire Apparatus

Fire Engineering

Fire Engineering Online

The Pennsylvania Fireman

FireRescue

FireRescue Online

Size UP / NYSAFC Magazine

ARFF News

Florida Fire Service / Florida Fire Chief's Association
magazine

Fire News

Fire Chief/FireRescue1.com

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STATISTICS COMMITTEE

Paul Bostrom

Mike Moore

Pat Cahill



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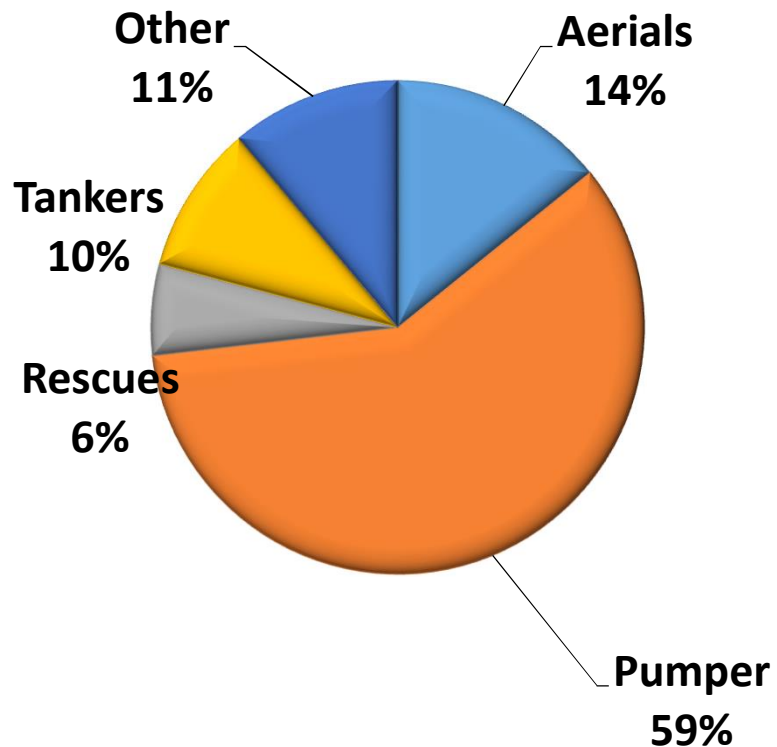


Statistics Updates

- “ User Select Categories
- “ Created a tutorial on use of statistics site.

The screenshot displays the FAMA Stats Program web interface. The browser address bar shows the URL <https://www.stats.fama.org/search/custom/1>. The page header includes the FAMA logo and navigation links: FAMA HOME, REPORTS, COMPANY DATA, HELP, and LOGOUT. The main section is titled "SEARCH BY DATE BOOKED". It features several dropdown menus for filtering data: Vehicle Class (All selected (34)), Chassis (All selected (2)), Transmission Type (All selected (2)), State (All selected (70)), Pumps (All selected (4)), Pump Type (All selected (4)), Foam (All selected (5)), and Foam Type (All selected (3)). There is also an Axles dropdown (All selected (2)). Below these filters, a date range selector is shown with "FROM:" set to 10-01-2016 and "TO:" set to 12-31-2016. A green "Search" button is located to the right of the date range. At the bottom, there are checkboxes for "Plot US map", "Plot Canadian map", and "Plot line graph of units by month or by quarter". A dropdown menu for the "Foam" filter is open, showing options: Select all, Class A, Class A and B, Class B, Compressed Air, and None.

Total Fire Apparatus Sales

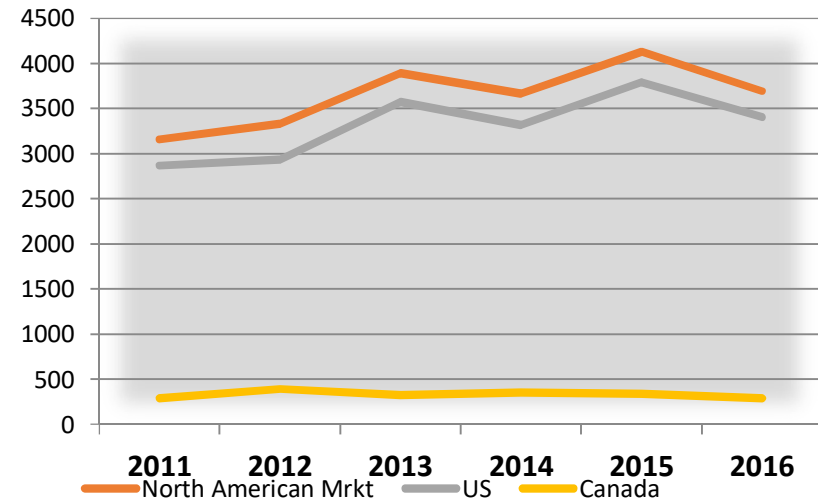


2016	All
Booked	4,214
Shipped	4,707

Industry Backlog Down 493 Units



North American Fire Apparatus Sales



Years	Average Yearly Vehicle Sales
2002-2008	5197
2009 -2015	3611
2016	3690

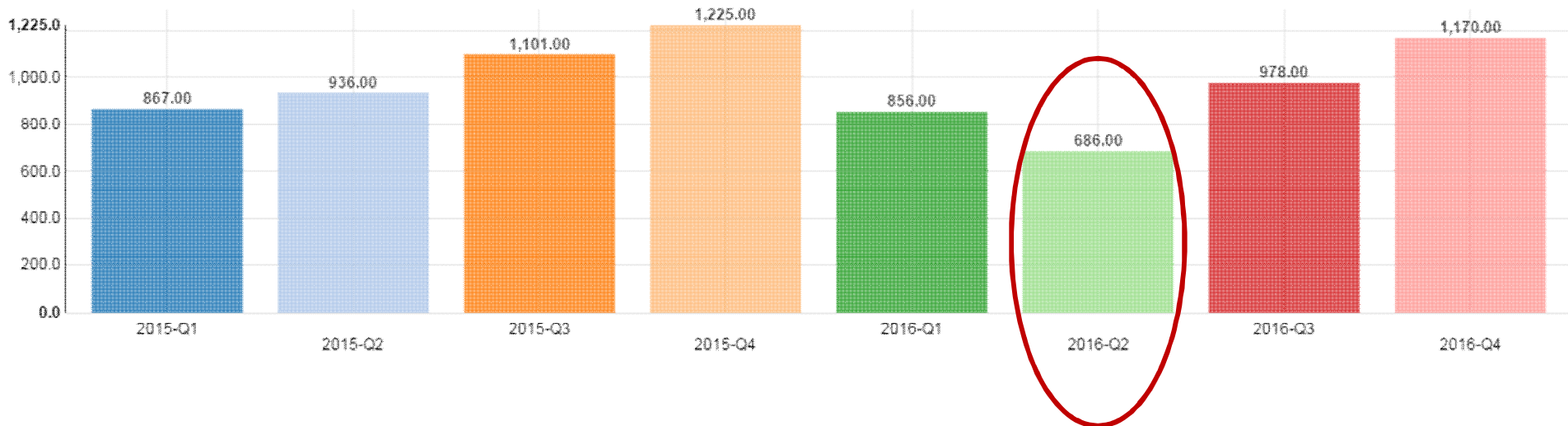
← **30% Decline in Market!**

← **2% Increase in Market**

Does not include ARFF or Refurbs



North American Fire Apparatus Sales

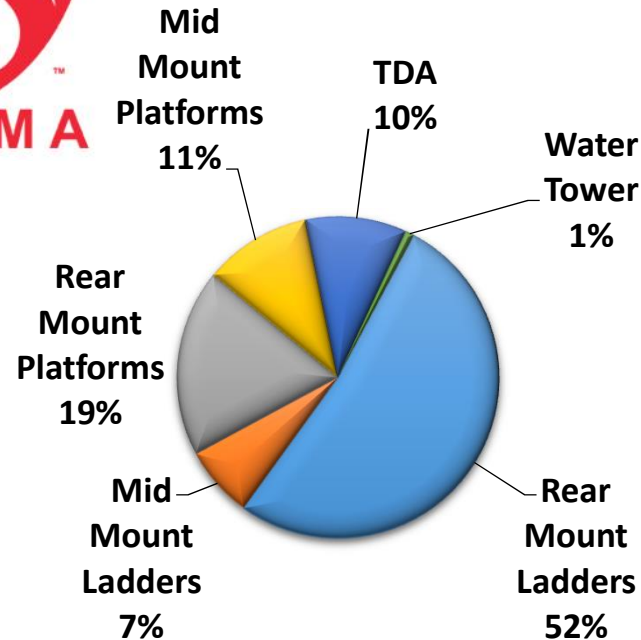


Bookings by Qtr. Market hasn't recovered from Q2.

Does not include ARFF or Refurbs

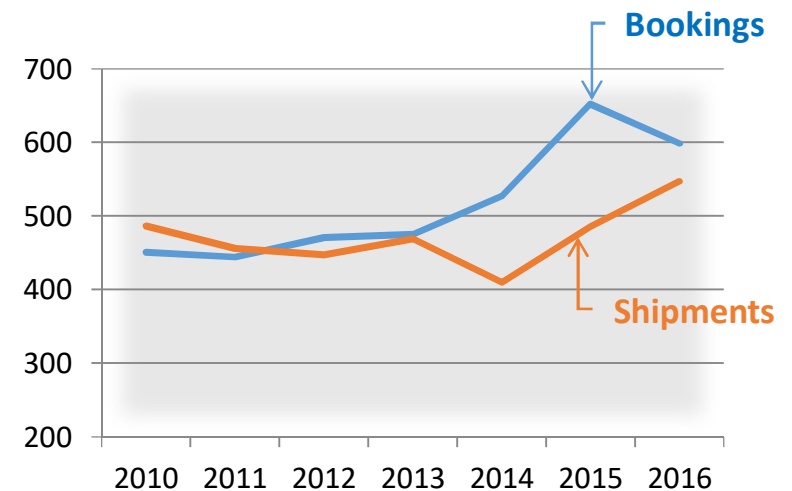


2016 Aerial Data (all)



Aerial Product	Quantity
Rear Mount Ladders	299
Mid Mount Ladders	41
Rear Mount Platforms	108
Mid Mount Platforms	62
Tillers	58
Water Tower (telescoping & articulating)	5

- “ 598 Booked
- “ Down 54 from 2015
- “ 547 Shipped
- “ Increase of 62 units
- “ +51 Industry Back Log

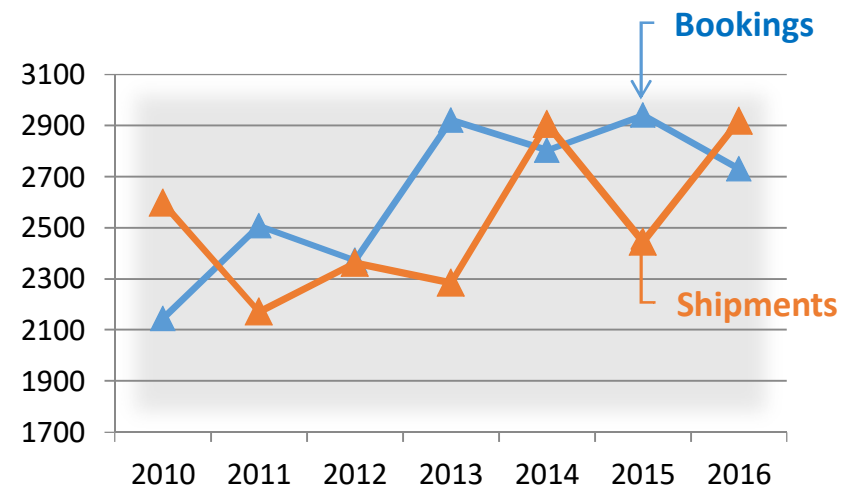
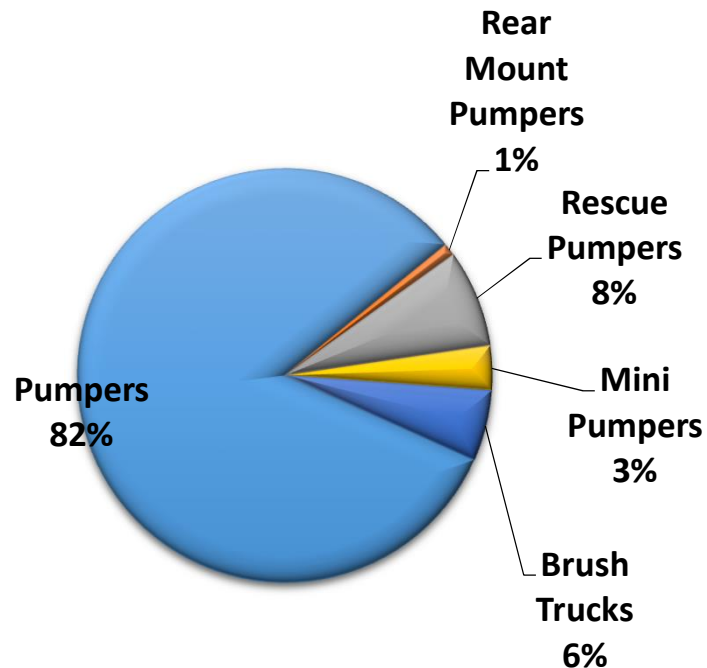




2016 Pumper Data (all)

Pumper Product	Quantity
Pumpers	2251
Rear Mount Pumpers	26
Rescue Pumpers	208
Mini Pumpers	95
Brush Trucks	150

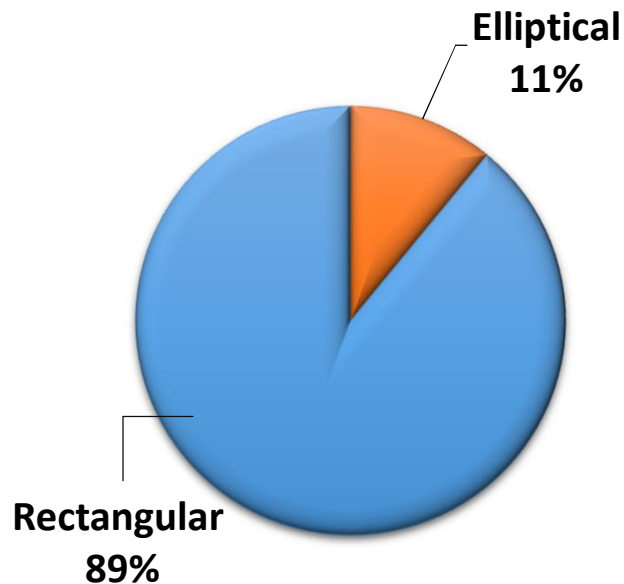
- “ 2730 Booked
 - “ Down 209 from 2015
- “ 2918 Shipped
 - “ Up 473 from 2015
- “ -188 Industry Back Log



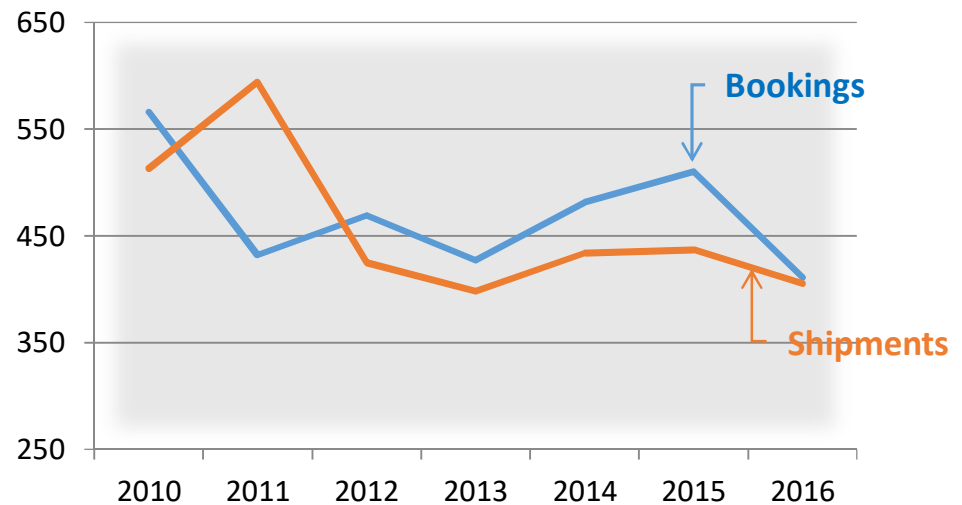


2016 Tanker Data (all)

Tanker Product	Quantity
Elliptical	45
Rectangular	366



- “ 411 Booked
 - “ Down 99 from 2015
- “ 405 Shipped
 - “ Down 32 from 2015
- “ +6 Industry Back Log





2016 Vehicles w/Pumps (all)

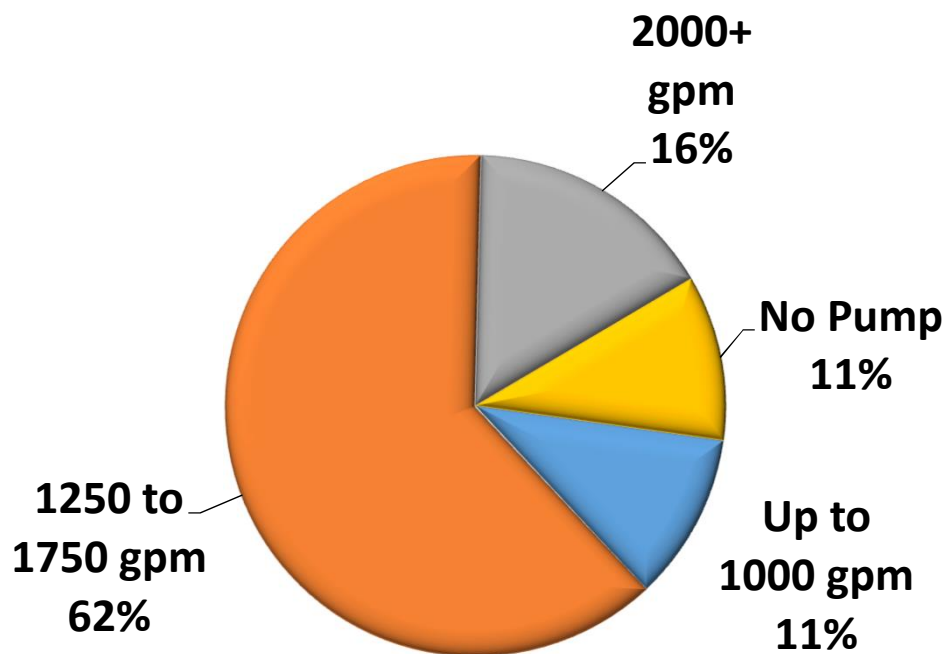
” 3763 Booked

” Down 314 from 2015

” 3,869 Shipped

” Up 341 from 2015

” -106 Industry Back Log

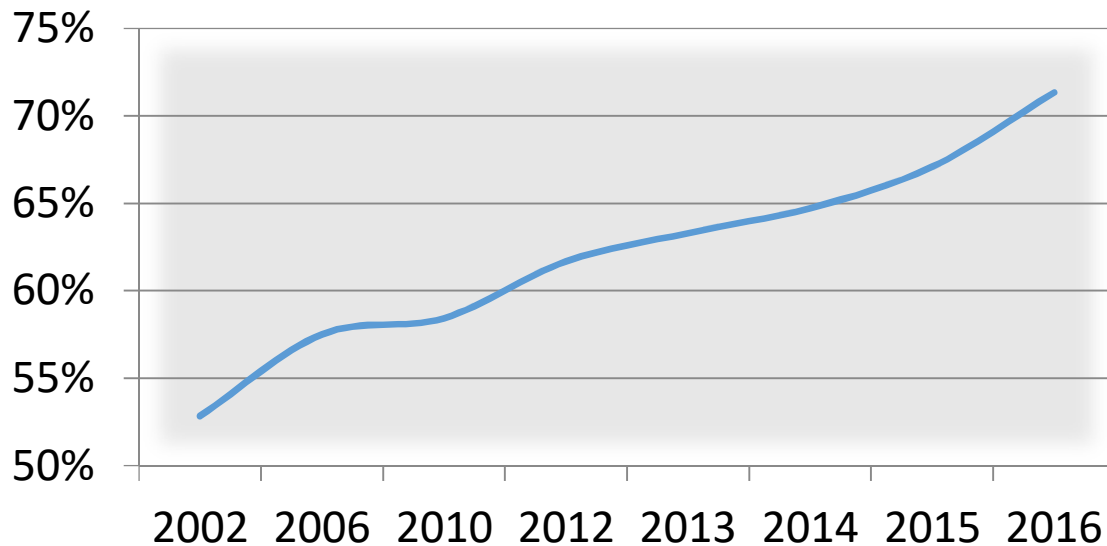


Vehicles w/ Pumps	Quantity
No Pumps	451
Up to 1000 GPM	455
1250 – 1750 GPM	2629
2000+ GPM	680



Custom vs. Commercial Chassis (All Vehicles)

**Custom Chassis Trend
All Products (Annual)**



Year	Commercial	Custom
2002	47%	53%
2006	44%	56%
2010	42%	58%
2014	35%	65%
2016	29%	71%



**Please
Continue to Submit Your Quarterly
Reports
In a Timely Manner**

**Goal:
Post Within 30 Days of Closing Qtr.**



Thank You!



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ANTITRUST ENFORCEMENT

**PRICE FIXING, BID RIGGING &
MARKET ALLOCATION SCHEMES**

Jim Juneau





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SHERMAN ANTITRUST ACT

- “ Prohibits any agreements among competitors to fix prices, rig bids, allocate markets or engage in most other types of anticompetitive activity.
- “ Enforced by U. S. Dept. of Justice . Antitrust Div.
- “ Violation is a **FELONY!**
 - “ **Corporate Violators:** **\$100 Million max. fine**
or two times the \$\$\$
involved.
 - “ **Individual Violators:** **\$1,000,000 max. fine +**
10 years imprisonment.



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SHERMAN ANTITRUST ACT

- “ **PLUS** – additional federal FELONY charges (and penalties) under separate mail fraud, wire fraud and/or false statement statutes
- “ **PLUS** – restitution to any %victims+for all overcharges
- “ **PLUS** – %victims+may also seek separate civil recovery from each violator for up to three-times the total amount of damages sustained.

IT'S ALL REALLY BAD STUFF!



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WHAT CONDUCT GETS PROSECUTED?

- “ **Bid Rigging** – Competitors agree in advance which vendor will submit the winning bid, and then collude to accomplish the agreed result.
- “ **Bid Suppression** – Competitors agree that one or more will refrain from bidding, or withdraw a bid, so that a preselected vendor will succeed.
- “ **Courtesy Bidding** – Competitors agree that one or more will submit a bid that is too high or is otherwise not competitive so that a preselected vendor will succeed.



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WHAT CONDUCT GETS PROSECUTED?

- “ **Bid Rotation** – Several competitors submit bids, but collude to take turns selecting which vendor will be the low-bidder, then rig bids accordingly.
- “ **Sub-contracting** – One or more competitors agree not to bid, or to submit uncompetitive bids, in exchange for receipt of sub-contract work on the project from by the successful bidder.
- “ **Market Division** – Competitors agree to divide the market amongst themselves (e.g. by location, product type, etc.) then rig their bids accordingly.



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WHAT ARE THEY LOOKING FOR?

“ Bid or Price Patterns –

- “ Same vendor always wins bids w/ that customer.
- “ Same vendors always bid the account, but the winning bid rotates among them.
- “ Some vendors bids are unusually high, especially compared to other similar bids made by that vendor on similar projects.
- “ Fewer than normal number of competitors submit bids.
- “ Bid prices drop when a new or infrequent vendor submits a bid.
- “ Winning bidder subcontracts work to competitors who submitted unsuccessful bids, or withdrew their bids, on same project.



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WHAT ARE THEY LOOKING FOR?

“ Bid or Price Patterns –

- “ Discounts normally given by a vendor are withheld.
- “ Prices stay identical among vendors where previously different.
- “ Price increases between comparable bids are not supported by any apparent increase in costs.
- “ Vendors bid higher for local customers than for distant ones.
- “ Vendor submits a bid that it is incapable of performing.
- “ Vendor requests a bid package, or submits bids, both for itself and for a competitor.
- “ Behavior indicating advance knowledge of competitor's pricing.



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OTHER INDICATORS OF COLLUSION...

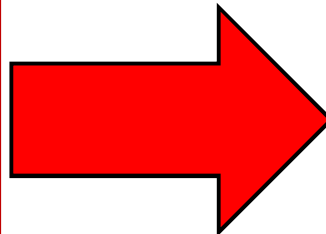
- “ Small number of primary vendors within an industry.
- “ Other vendors product cannot be easily substituted for the preferred vendor's product due to restrictive specs.
- “ Vendor assists customer in writing or preparing specs.
- “ Repetitive purchases where different vendors seem to share the work.
- “ Competitors who know each other well through social connections, trade associations, or shifting Whack-A-Mole employment pattern among companies in the same industry.
- “ Vendor reps. who congregate together in same place just before bid submission.



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Antitrust Violations are Serious Crimes

**They can cost a company millions of dollars
and send nice folks to jail for up to TEN YEARS!**



Don't
be that
Guy!



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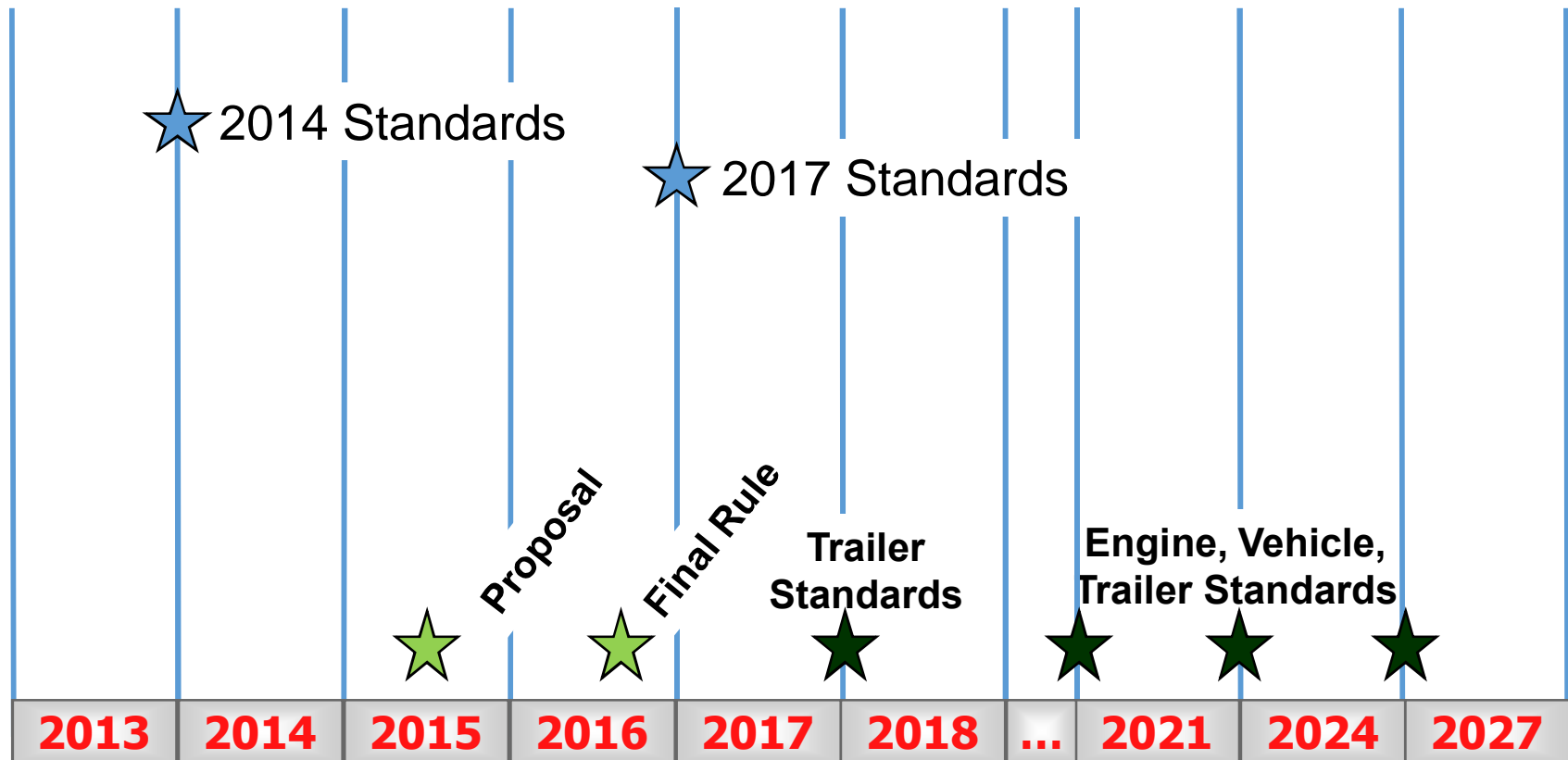
EPA CHANGES

Chris Crowel
Wes Chestnut



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EPA/NHTSA Regulatory Timeline

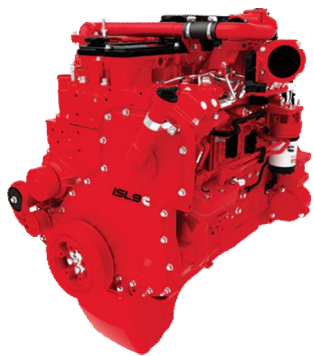




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GHG phase 2 Regulatory Structure

Engine



+

Tractor/Chassis



+

Trailer





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Engine Technologies








- “ Phase 2 engine technologies build on recent progress
- “ Advancements for 2021 and beyond:
 - “ Improved combustion
 - “ Air handling efficiency
 - “ Friction reduction
 - “ Aftertreatment efficiency
 - “ Advanced technologies




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Phase 2 Vehicle Segmentation


Combination Tractors

	Day Cab		Sleeper Cab
	Class 7	Class 8	Class 8
Low Roof			
Mid Roof	--	--	
High Roof			

Heavy Haul Tractors

	Class 8
Low/Mid Roof	
High Roof	

Vocational Vehicles

	Class 2b-5	Class 6-7	Class 8
Regional			
Multi-purpose			
Urban			

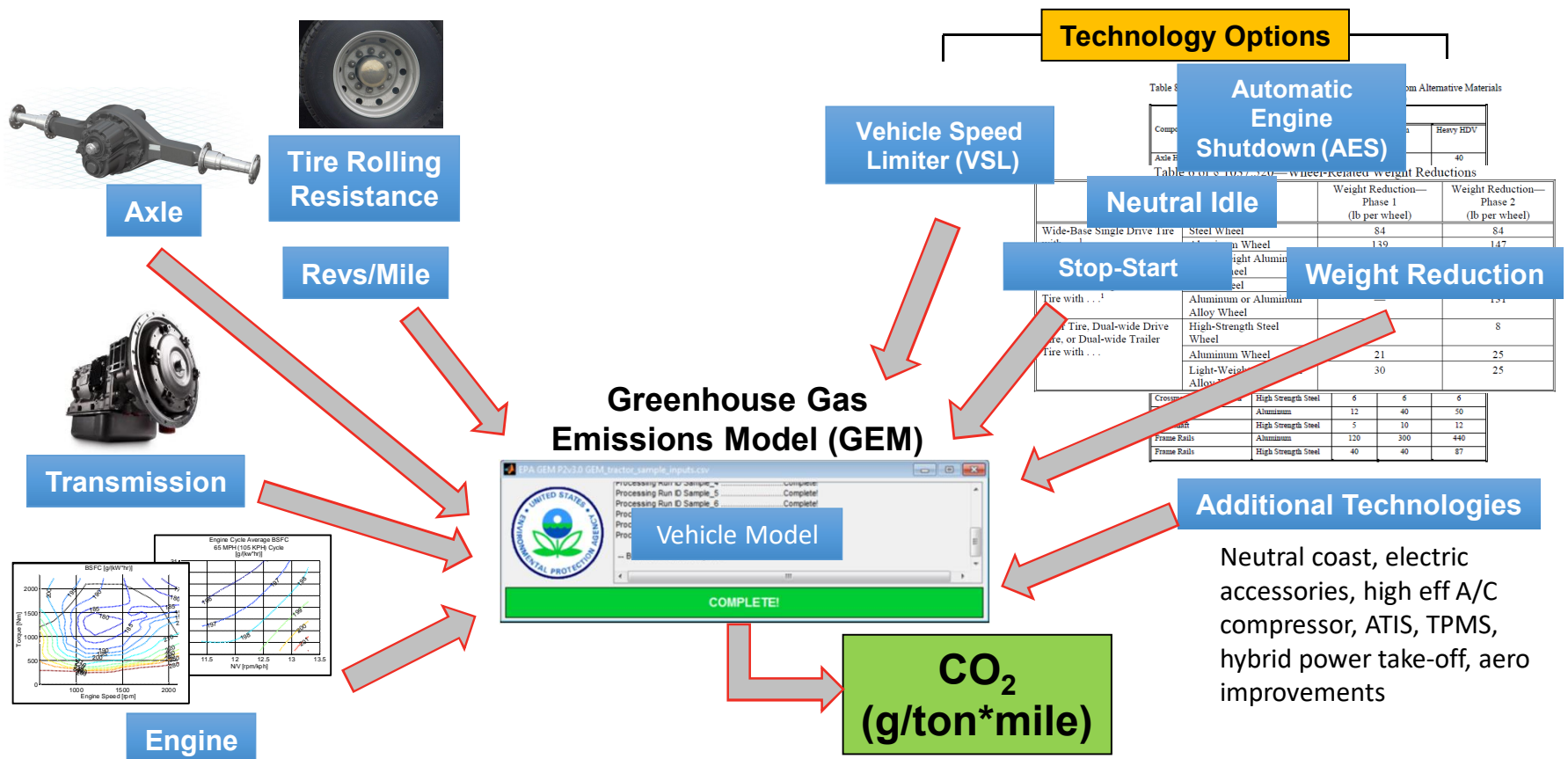
Custom Chassis Vocational

	Class 6-7	Class 8
Motor Home		-
School Bus		-
Coach Bus	-	
Transit Bus	-	
Emergency Vehicle	-	
Concrete Mixer	-	
Refuse	-	



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Vocational Vehicle Simulation (GEM)





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Optional Emergency Vehicle Certification

“ Emergency Vehicles (EV) can be optionally certified to Phase 2 GHG standards by using tires with low rolling resistance levels (RRL):

“ MY2021 . MY2026 RRL m8.7 g/tonnes

“ MY2027+ RRL m8.4 g/tonnes

“ Under this pathway, the EV must:

“ Use a certified Phase 2 engine

“ Comply with Air Conditioning (A/C) leakage requirements (see next slide)



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Air Conditioning Leakage Compliance

- “ Starting in MY2021, vocational vehicles must comply to A/C leakage requirements
 - “ Total leakage from the A/C system must not exceed the greater of:
 - “ 11.0 grams/year *or*
 - “ 1.5% per year
 - “ Above compliance for all refrigerants



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Summary

- “ Phase 2 GHG impacts 2021- small business granted an additional year
- “ Refrigerant leakage (air conditioning) is now part of the GHG standard
- “ A certified engine is required in the standard
- “ Cummins is confident that technologies will be in place to meet the new standards
- “ Emergency vehicles can certify using:
 - “ Use of the GEM model with multiple inputs
 - “ Alternative . use of low RRL tires and low leakage refrigerant components
- “ FAMA continues to work with regulatory agencies



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Resources

- " Public information on agency websites
 - " Fact sheet, video, regulatory text, supporting documents
 - " <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks>
 - " <http://www.nhtsa.gov/fuel-economy>



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Economic Indicators

Anirban Basu



RESULTS – OPEN MIC SESSION

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Step 1

Ask your audience a question with the Poll Everywhere app



Step 2

Audience answers in real time using mobile phones, Twitter, or web browsers



Step 3

See your response live on the web or in a PowerPoint presentation



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UNFINISHED BUSINESS

NEW BUSINESS



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CLOSING REMARKS



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